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VOLUME 2

THE RECONNAISSANCE SQUADRON IN BATTLE

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FOREWORD

- 1. B-OL-305-002/FT-001, Armour The Reconnaissance Squadron in Battle, is issued on authority of the Chief of the Defence Staff.
- 2. This publication is effective on receipt and supersedes CFP 305(2), The Light Armoured Regiment, issued 18 Feb 72.
- 3. Suggestions for changes shall be forwarded through normal channels to Mobile Command Headquarters, Attention SSO Armoured.

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CHAPTER 1

INTRODUCTION

101. Aim

The aim of this manual is to detail the tactical doctrine for the employment of the reconnaissance squadron allocated to a standard brigade. It is a guide for operations and forms the basis of training for war.

102. Scope

- 1. Information is provided on the role, characteristics, command, control, and tactical employment of the squadron and the troops as the brigade commander's primary ground reconnaissance force. Although emphasis is placed on the squadron's inherent resources, discussion will be extended to include the support which the squadron will require to perform certain tasks.
- 2. The organization used is the reconnaissance squadron of the standard brigade group armoured regiment.
- 3. Although the tracked squadron is the basis for discussion, the tactics herein can be adapted to wheeled reconnaissance vehicles, or in the case of militia armoured regiments, to the 1/4 ton jeep.
- 4. This manual should be read in conjunction with B-OL-305-001/FT-001 (CFP 305(1)), The Armoured Regiment in Battle, B-OG-301-001/FP-001 (CFP 301(1)), Land Formations in Battle and B-OL-305-004/FT-001 (CFP 305(4)), The Reconnaissance Troop Leader's Manual.

103. Application

- 1. The doctrine discussed in this manual is designed to provide guidance for operations, as opposed to a set of inflexible rules. Individual initiative and common sense in adapting the principles to prevailing tactical situations will be the key to success in battle.
- 2. The basic reconnaissance element is a patrol of two vehicles. Everything and everyone else in the squadron exists to assist and extend the capabilities of patrols.
- 3. Terms used throughout the manual are consistent with current Canadian Terminology which to a large degree is NATO standardized.

104. The Threat

- 1. The reconnaissance squadron will normally be the first organization in the brigade to encounter the enemy. It is of paramount importance, therefore, that each individual become an expert in recognition of enemy equipment and knowledge of enemy tactics. The basic references to acquire this knowledge are:
 - a. AC 70735, Notes on Soviet Ground Forces;
 - b. CFP 386, Recognition Guide to Soviet Aircraft; and
 - c. Combat Recognition Guide.
- 2. The sophistication of modern weapons has dramatically increased the lethality of the battlefield and the problems of control. We are quickly drawing close to the point where anything which can be observed, can be hit and destroyed. Some examples which emphasize this point follow:
 - a. <u>Tanks.</u> In the case of tank versus tank engagements at 1500 meters, in World War 11 it took 13 rounds to achieve a 50 per cent hit probability. Current tanks can achieve that same hit probability in one round.
 - b. <u>Anti-Tank Weapons.</u> The increase in the penetration capability of Infantry antitank weapons at long ranges has far outstripped the increase in protection offered by the armour of current tanks. Crew served anti-tank weapons have tripled their effective range in less than 20 years.
 - c. <u>Artillery.</u> Improved conventional munitions when compared to ordinary high explosive rounds produce up to four times the casualty effect against personnel targets. More pertinent to armour, precision guided projectiles fired from conventional artillery pieces can destroy tanks with a good probability of first round success.
 - d. <u>Close Air Support.</u> Operational tests and experience in the 1973 Middle East War clearly demonstrated the effectiveness of ground attack fighters against tanks.
 Guided bombs and missiles provide a stand-off capability which combine their greatly increased accuracy with greatly reduced exposure time of the attacker.
 - e. <u>ECM.</u> Modern technology, the widespread use of radios, electronically guided firepower and the enemy's training in and use of electronic warfare techniques will pose a serious threat to units highly dependent on the radio (especially VHF) and such guided weapons. Intermittent and even persistent jamming is likely to be the norm rather than the exception.
- 3. The lethality of modern weapons must be examined in conjunction with threat force

tactics. In the offence the enemy will normally attack in mass, possibly in two echelons with a tank-heavy reserve. They will probably attempt to achieve a larger than three to one advantage in tanks, artillery and infantry. Their tactics may consist of penetrating forward positions, destruction of main battle positions in the area of penetration, and seizing deep and separated objectives. A typical attack scenario follows:

- a. The attack might begin with massive artillery preparation, with at least 70 to 100 tubes per kilometer of frontage and ECM activity.
- b. A tank-heavy first echelon force will normally attempt to penetrate the defence, and subsequent echelons might employ mass to exploit any weaknesses. Heavy enemy fighter ground attack support should be expected throughout.
- c. At the time of penetration, airborne and airmobile units may be inserted to isolate parts of the defensive position, engage reserves and break the cohesiveness of the defence.
- d. After penetration is achieved, tank-heavy groupings may be sent through the breach to maintain the momentum of the attacking echelons.
- 4. Our potential enemies consider chemical operations a normal part of conventional war and have declared their intention to use these weapons in future conflict. They train under a simulated chemical environment and have a chemical capability integrated down to regimental level.

105. Categories of Reconnaissance

- 1. Land force of reconnaissance is categorized as follows:
 - a. <u>Combat Reconnaissance</u> is the collection of information by combat arms elements within battle groups in the course of close combat with the enemy.
 - b. <u>Close Reconnaissance</u> is reconnaissance conducted by a battle group or brigade group headquarters on specific tasks within their areas of influence. This is the domain of the brigade reconnaissance squadron and of infantry reconnaissance platoons.
 - c. <u>Medium Reconnaissance</u> is conducted by reconnaissance units under the direct control of a higher formation headquarters. The range of operations could extend to the limits of the formation's area of interest with the purpose of determining the location, composition and disposition of enemy reserves, nuclear delivery means and supporting troops which can influence the immediate battle.
 - d. <u>Long Range Reconnaissance</u> involves the collection of information beyond the limits of medium range reconnaissance. Special units will normally conduct such

tasks.

106. Concept

- 1. Canadian doctrine holds that brigade level reconnaissance units should be lightly armed for self-protection, mounted in fast and agile vehicles, equipped with extensive radio communications and organized to operate a large number of sub-units in surreptitious reconnaissance.
- 2. Although, in garrison, the reconnaissance squadron will be an integral part of the armoured regiment, in operations it will normally operate independently under the direct control of the brigade commander.
- 3. The reconnaissance squadron is required to provide information to the brigade commander and most tasks will involve reconnaissance or surveillance. Without important augmentation in firepower, the squadron has almost no capability to impose delay on a determined enemy. It can observe, report, maintain contact and provide warning, but little more.

(107 to 199 inclusive: not allocated)

CHAPTER 2

THE RECONNAISSANCE SQUADRON

SECTION 1 - GENERAL

201. Organization

- 1. The reconnaissance squadron (SBG) is organized as follows: (See Figure 2-1).
 - a. <u>Squadron Headquarters.</u> Squadron headquarters (SHQ) contains the personnel, communications and equipment required for command and control of the squadron. In addition it collects, verifies, briefly collates and passes information to brigade headquarters.
 - b. <u>Reconnaissance Troops.</u> There are three identical seven-vehicle reconnaissance troops. Each troop comprises the troop leader and three patrols designated as ALPHA, CHARLIE, and ECHO patrols.
 - c. <u>Support Troop.</u> This troop provides the personnel, vehicles and equipment to provide surveillance and other support to the reconnaissance troops. It is equipped with five APCs, two of which are equipped with a dozer blade.
 - d. <u>Administrative Troop.</u> The administrative troop consists of the vehicles and equipment required to support the squadron's operations. It may be divided into A1, A2 and B echelon elements.

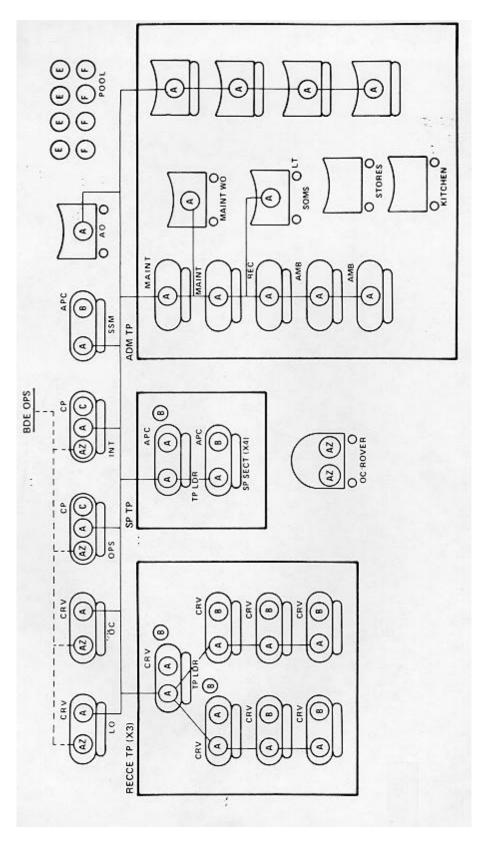


Figure 2-1 Reconnaissance Squadron Organization and Communications

202. Role

The role of the reconnaissance squadron is to obtain accurate tactical information on the enemy and the ground in all phases of war and pass it back quickly to the higher commander.

203. Characteristics

- 1. <u>Mobility.</u> The squadron can move by roads or cross-country in any terrain which is passable by the brigade. The high speed and agility of the F echelon vehicles permits wideranging operations and fast shifts in groupings and direction of effort. Unit personnel are capable of foot patrolling, however, such operations separate the crews from their vehicles and hinder subsequent mobility.
- 2. <u>Flexibility.</u> The Squadron's mobility coupled with its extensive communications are the keys to operational flexibility. This permits reassignment of tasks, quick deployments, and the rapid execution of diverse taskings. Flexibility is increased by good troop and squadron drills and battle procedure which enables redeployments without detailed orders or centralized regroupings.
- 3. <u>Logistic Economy.</u> With its inherent administrative echelon, and the range of its vehicles, the squadron is capable of extended operations with a minimum of logistic support.

4. Limitations.

- a. <u>Lack of Firepower.</u> Except for a modest issue of hand-held anti-tank weapons, the main source of firepower is the heavy machine gun. The most important effect of this limitation is that the squadron is unable to defeat even lightly armoured vehicles at a range greater than 500 meters. This precludes fighting for information or the execution of guard or delay missions without augmentation in firepower.
- b. <u>Vulnerability in Close Quarter Fighting.</u> Because of the noise of the vehicles and the limited manpower available for dismounted patrolling, the squadron is extremely vulnerable in, or on the periphery of built-up areas or woods. Supporting infantry is required to provide protection.
- c. <u>Endurance.</u> The squadron has no spare crews. Prolonged operations, situations of continued stress and casualties will rapidly become limiting factors.
- d. <u>Reserve.</u> It will seldom be possible for the squadron to retain a strong reserve.

204. Primary Tasks

1. The two primary tasks of the unsupported reconnaissance squadron are reconnaissance and surveillance.

- a. <u>Reconnaissance</u> is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.
- b. <u>Surveillance</u> is the continuous, systematic watch over the battle area by visual, aural, electronic, photographic or other means to provide information for combat intelligence.
- 2. A reconnaissance squadron may also perform other tasks such as:
 - a. <u>Guard.</u> This is a force with the primary tasks of delaying the enemy for a period of time in addition to observing and reporting. If reinforced with armour, artillery, infantry or anti-tank weapons, the reconnaissance squadron could be tasked with a guard or delay task.
 - b. <u>Escorts to Convoys, VIPs and Prisoners.</u>
 - c. <u>Traffic Control.</u>
 - d. <u>Detection, Monitoring and Surveying of Chemical and Radiological</u> Contamination.
 - c. Rear Area Security.
 - f. <u>Liaison for Passage of Lines.</u>
 - g. <u>Anti-airborne/Airmobile Surveillance.</u>

205. Principles of Employment

- 1. <u>Observe Without Being Detected.</u> The importance of good observation techniques, coupled with concealment and other protective measures, is obvious for the squadron which has limited firepower but which is tasked to locate powerful enemy reconnaissance elements, advance guards or delaying positions.
- 2. <u>Make and Maintain Contact.</u> It is a general rule that once contact is made it is maintained and not broken without authority from higher HQ. Higher HQ may authorize the breaking of contact either by retaining authority to by-pass enemy of any size or by issuing a by-pass policy. When contact is to be maintained it should be effected by either ground or air observation.
- 3. <u>Report Accurately and Maintain Communications.</u> It must be recognized that higher level decisions may be based on information reported by individual patrols of the squadron. To be of value information must be timely, and above all accurate. The incorrect identification of a single piece of enemy equipment can ultimately mislead the staff of a higher HQ and result in the wrong

decisions being made. In addition, the squadron's reliance on its abundant radio resources must be complemented by sound anti-jamming procedures and alternate communication means.

- 4. <u>Avoid Decisive Engagement.</u> Whenever possible, information must be obtained by stealth. Decisive engagements with the enemy should be avoided except in self-defence when evading the enemy.
- 5. <u>Confirm Enemy Disposition.</u> When enemy contact is made or an obstacle is encountered, the situation must be developed quickly. This implies that reconnaissance commanders at all levels, on their own initiative and within the framework of their orders, must conduct such manoeuvres as are appropriate to increase the information gained at initial contact.
- 6. <u>Maintain a Reserve.</u> Although resources are scarce within the squadron, the requirements for maintaining contact and the need to by-pass and define the enemy are such that every effort must be made to maintain a reserve.

SECTION 2 - OPERATIONAL DUTIES AND RESPONSIBILITIES

206. Squadron Headquarters

- 1. <u>The Squadron Commander</u> is responsible for the organization, battle efficiency, training, discipline and welfare of his squadron. He commands from his tactical rover or from the command post (CP), depending on the tactical situation.
- 2. <u>The Battle Captain</u> must be prepared to assume command of the squadron temporarily during an operation until the squadron commander returns or is replaced. Otherwise he remains with SHQ and travels in one of the CPs. Under his supervision, SHQ provides the necessary control facilities to permit the squadron commander to exercise effective command. Specifically, the battle captain is responsible for:
 - a. the efficient operation and training of the SHQ staff;
 - b. the overall layout, defense and operation of SHQ and in particular, the operation of the CP complex;
 - c. the drafting of operational staff work;
 - d. the staging of orders groups; and
 - e. performing as primary duty officer in the squadron CP.
- 3. The Squadron Liaison Officer represents the squadron commander and acts as a link to brigade or other headquarters. He must be fully conversant with the squadron plan and must be prepared to provide advice on reconnaissance matters to the brigade commander's staff. He is provided with a tactical rover and must always remain on the squadron net. He understudies and must be prepared to replace the battle captain. When not employed on liaison duties he is tasked as a duty officer.
- 4. <u>The Operations Warrant Officer</u> is responsible to the battle captain for the detailed preparation and maintenance of the CPs. He supervises the duties of all SHQ other ranks including:
 - a. training and organization of CP operators and drivers;
 - b. organization of O Groups as directed by the battle captain;
 - c. security of SHQ and controlling access to the CP complex; and
 - d. preparation of CP duty rosters and organization of personnel for moves.

He travels in one of the CPs, and is a duty officer.

- 5. <u>The Squadron Signal Sergeant</u> is the squadron commander's advisor on signal matters. He travels in one of the CPs and his duties include:
 - a. the preparation, distribution and control of COMMSEC equipment;
 - b. the technical preparation, maintenance of and accounting for communications equipment in the CP complex;
 - c. assisting the battle captain in selecting proposed sites for SHQ;
 - d. supervising and instructing troop signals representatives as directed by the battle captain; and
 - e. employment as a duty officer.
- 6. The Intelligence Sergeant's duties include:
 - a. the preparation and dissemination of intelligence information;
 - b. the preparation of maps, traces and overlays on the enemy;
 - c. maintenance of information on enemy ORBATS and equipments;
 - d. preparation of intelligence briefings as directed by the battle captain;
 - e. act as a the squadron NBCW NCO; and
 - f. act as duty officer on squadron net when required.

He will understudy the operations warrant officer and travels in one of the CPs.

207. Troop Leaders

Reconnaissance and support troop leaders command their troops and are responsible for their battle efficiency. They must be prepared to relieve the battle captain or liaison officer if required.

208. Administrative Troop

1. <u>Squadron Administrative Officer.</u> He is responsible for all aspects of squadron administration and commands the administrative troop. He must be prepared to replace the battle captain or the liaison officer. When the situation demands he may be called forward to act as a duty officer in the CP and when A2 echelon is formed, he controls its movement.

- 2. <u>Squadron Sergeant Major.</u> He controls the squadron A-1 echelon when A echelon is split into A1 and A2 echelons.
- 3. <u>Squadron Quartermaster Sergeant.</u> He controls the B echelon when formed, and otherwise operates from A2 echelon.

(209 to 299 inclusive: not allocated)

CHAPTER 3

COMMAND AND CONTROL

SECTION 1 - GENERAL

301. Introduction

During operations the reconnaissance squadron will normally be detached from the Regiment and operate under the direct control of the brigade headquarters, acting as the brigade commander's primary source of ground reconnaissance. The squadron commander will attend brigade orders groups.

302. Factors Affecting Command and Control

- 1. Command and control is the technique by which a commander applies established operational procedures and communications to deploy his troops and equipment and to direct their actions to achieve his aim. The effective exercise of command and control depends on:
 - a. leadership of the reconnaissance commander;
 - b. grouping of resources;
 - c. the effective use of control measures;
 - d. good communications;
 - e. timely and accurate intelligence;
 - f. sound standard operating procedures; and
 - g. effective battle procedure.

303. Leadership of the Reconnaissance Commander

1. The main burden of leadership in the recce squadron falls to a greater extent than usual on the junior commanders, troop and patrol leaders, because of the inherent decentralization of the squadron in operations. The squadron commander's personality, example and powers of individual leadership, however, will have a direct influence on the fighting spirit of his men. His influence will be most important in the training of his subordinates, particularly by developing independence, trust, and their use of initiative amongst the troop leaders and patrol commanders. In operations, his impact will be felt mostly in the careful and detailed planning of the operation, the issue of realistic and effective orders, and the control and execution of these orders. He should normally be where command and control of the squadron is best accomplished; this may not be at squadron HQ.

- 2. In particular, the squadron commander must establish personal contact with his troops at the following times:
 - a. during critical periods when his presence could affect the outcome of the operation;
 - b. following the completion of an important phase of the mission, once stability has been achieved:
 - c. during quiet periods; and
 - d. when an operation is over, particularly when heavy casualties have been suffered.
- 3. Although the squadron commander will generally exercise command through his troop leaders, his personal relationship with his men is an important factor in making his squadron an efficient force, determined to accomplish its assigned mission.

304. Grouping

- 1. Grouping is the organization of a unit into tactical groups best suited to carry out a particular mission, and the definition of operational relationships within these groups.
- 2. If the squadron does not receive attachments, flexibility in grouping comes from the support troop. The squadron commander has several options in attaching support sections to reconnaissances troops for specific missions.
- 3. Helicopters from the tactical helicopter squadron reconnaissance flight are normally tasked in direct support of the squadron. The basic concept of helicopter support to the squadron is the air/ground team. The squadron commander will usually group two helicopters with each reconnaissance troop, although the situation could allow two aircraft to support two troops working on parallel axes. When helicopters are attached to troops, the command relationship should be "in support". Planning for use of helicopters should be superimposed on and not essential to the tactical plan.
- 4. Other attachments such as armour, infantry, anti-tank weapons, and engineer reconnaissance will be grouped in accordance with the squadron commander's appreciation and plan.

305. Control Measures

1. Movement on the battlefield must be carefully controlled by the squadron commander, but sufficient flexibility for the exercise of initiative by subordinate leaders must be provided. The methods available to the squadron commander to exercise control and coordination of movement are defined in Annex A. The value of control measures lies in the ease with which

they can be referred to on the radio.

2. Since SHQ reports on the brigade command net it is important to remember that only control measures allotted by brigade headquarters can be used on this means. The use of the squadron's own control measures must be restricted to domestic nets and should be of a standard nature to avoid compromising unit type.

306. Communications

- 1. Efficient communications are the life-blood of the reconnaissance squadron. Information, to be of value, must be passed quickly and efficiently. A sound knowledge of voice procedure, user maintenance, and the capabilities and limitations of communications equipment is vital at all levels. Correct siting of radio-equipped vehicles and antennae, the use of remote rebroadcast and manual relay procedures, good step-up drills and the employment of the radio facilities in helicopters when they are available, are important factors in ensuring good communications.
- 2. The squadron will be operating in high risk forward or flanking areas and will often be the first brigade troops to contact the enemy. Because of this, certain points peculiar to reconnaissance squadron operations must be noted.
 - a. The squadron should be issued with high risk, (limited distribution) operations and numerical codes.
 - b. The squadron will be a natural target for intercept and jamming as it will often be the first to break electronic silence on the squadron and on the brigade command nets. Anti-jamming drills, short transmissions, screening from the enemy, use of lower power when possible, use of HF means when available/possible, and frequent moves of the CPs must be emphasized. Annex B provides guidelines for communications without radio.
 - c. The squadron will be operating over a wide area and often in proximity to a large number of friendly units. To minimize the possibility of interference with or from adjacent units the squadron may require a larger and more carefully considered allocation of frequencies than other units.
- 3. <u>Means of Communication.</u> The communications facilities inherent to the squadron are:
 - a. radio;
 - b. line; and
 - c. liaison officer(s).
- 4. Radio.

- a. A-Set. This radio is common to all vehicles in the squadron and to the LOH helicopter. Under good working conditions it has a range of up to 35 kilometers. It is usually preferable for the complete squadron to operate on one net to ensure that all transmissions are heard simultaneously. Employment of a squadron frequency demands rigid radio discipline and a high standard of voice procedure. Any two-set installation equipped with the correct cable can be used as a remote rebroadcast (RRB) station to extend communications ranges, (technical RRB), or to join two nets together, (tactical RRB). Finally, SHQ has a secure voice facility. The use of secure means can be a double-edged weapon if not properly handled. Conversations tend to get lengthy and all transmissions, sent or received secure, must be passed down encoded.
- b. <u>A-Set Remote.</u> The remote facility of the A-set is a most piece of equipment as it provides:
 - (1) telephone communication between the remote and the operator of the control set.
 - (2) radio set transmission and reception from the remote control unit, and
 - (3) radio set transmission and reception from the control set.
- c. <u>B-Set.</u> Each vehicle in the reconnaissance and support troops also has a B-set installation for monitoring other nets and most have a B-set manpack for dismounted operations.
- d. <u>C-Set.</u> The two CPs are equipped with an RF set generally used on brigade command net guard frequencies. The C-set also comes equipped with a remote facility. A limited number of HF manpack sets are available for distribution to troops. These can provide as back-up communication system to SHQ and could prove particularly effective since HF frequencies are more difficult for the enemy to detect and to jam.
- e. <u>UHF.</u> A limited number of UHF manpack sets are available in the squadron for ground to air/air to ground communications with FGA aircraft.
- 5. <u>Line.</u> Because of the mobile nature of reconnaissance operation, the use of line will be the exception rather than the rule. Its use can save strain on operators, radio sets and batteries, and in some circumstances can be more secure than radio. It should be laid in harbour whenever possible and can be put to good use in A2 and B echelons. Line is susceptible to wiretapping, shelling, and damage by tracked vehicles.
- 6. <u>Liaison Officers.</u> The squadron liaison officer is the personal representative of the squadron commander and as such must be fully conversant with the plan and situation. He is provided with a rover with a three set installation and must remain on the squadron net at all

times. The liaison officer, or for that matter, any vehicle crew in the squadron, can be used for the physical communication of tactical information.

- 7. <u>References.</u> Primary signal references for the squadron are:
 - a. ACP 125 Cansupp 1A;
 - b. CFP 322(2), Field Radio Operator Duties and Responsibilities; and
 - c. CFP 321(6), Signal Field Handbook.
- 8. Fixed callsigns for all radio-equipped vehicles in the squadron are given in Annex C.

307. Intelligence

- 1. Timely, accurate intelligence is essential for effective command and control. The squadron commander must have all information on the enemy available within the brigade before he commences his battle procedure. During an operation the continuous flow of intelligence data from sources outside the squadron is fundamental to the execution of the mission.
- 2. SHQ is neither manned nor equipped to cover all aspects of the complete intelligence process of direction, collection, processing and dissemination. What it must do however, is ensure that intelligence data from the troops is collected and passed quickly back to brigade headquarters, and that pertinent data from flanking units and brigade headquarters is sent to the troops in a concise and useable form.
- 3. Intelligence responsibilities in SHQ are covered in more detail in article 321.

308. Standing Operating Procedures

- 1. Good SOPs can contribute greatly to ease of command and control. They are developed to reduce certain activities within the squadron to well-known and automatically applied procedures. They must be developed for both operations and administration.
- 2. A suggested table of contents for squadron SOPs is given in Annex D.

SECTION 2 - BATTLE PROCEDURE

309. General

- 1. Battle procedure is the concurrent process by which a commander makes his reconnaissance and plan, issues his orders, and prepares and deploys his troops for battle. While reconnaissance is being carried out and orders given by successive commanders, concurrent preparations are made at lower levels and main bodies carry out preliminary moves.
- 2. Except for certain administrative activity which goes on continuously, squadron battle procedure begins with a warning order from brigade headquarters. Table 3-1 outlines a typical sequence of activity for initial deployment.
- 3. In view of the need for the squadron to commence deployment earlier than the remainder of the brigade, it is imperative that a well-practiced battle procedure be in effect so that a minimum of time is required for the squadron to commence its mission.
- 4. Once an operation is underway, new orders or the enemy's reaction may require changes in the original plan, grouping, or deployment. It may not be possible to apply the whole sequence of battle procedure in situations such as this, but time will be saved if as many of the steps are followed as possible.
- 5. It is emphasized that preparations for battle must go on concurrently. For example, while the squadron commander is making his reconnaissance, his O Group may be moving to the RV for orders, the harbour parties may be reconnoitring harbours and routes forward, and the main body may be making administrative preparations such as replenishing its fuel, ammunition and rations for the forthcoming mission. Simultaneous action by all elements of the squadron will ensure that time is saved and troops are prepared for their task.

310. Warning Orders

- 1. The issue of a timely warning order will permit squadron troops to start their own battle procedure and prepare for operations in an orderly manner. Warning orders at all levels should include as much of the following information as possible:
 - a. a brief outline of the situation;

Brigade RGP	Brigade OGP	Squadron RGP	Squadron OGP	Troops
Bde commander called to higher formation O gp. Before leaving with his R gp he issues a warning order.		Squadron commander issues his warning order, prepares to move to designated rendez-vous.		Prepare for battle in present location.
After receipt of orders, bde commander conducts a reconnaissance, makes an appreciation and plan, and prepares his orders.	Arrive at rendez-vous. Mark maps and receive briefing on situation.		Begin move to rendex-vous at designated time.	If a move from present location to a forward position is necessary, then troops prepare to move forward.
	Receive bde commander' orders.	Conduct reconnaissance, make appreciation and plan, and prepare orders.	Arrive at rendezvous. Receive squadron commander's orders then conduct their own reconnaissance as required, and prepare their plans and orders.	Move forward if required. Receive orders from their troop leaders, complete table preparations, then execute orders.

Table 3-1 Battle Procedure Sequence

- b. probable tasks;
- c. earliest time for move, or degree of notice to move;
- d. time and location of R and O groups;
- e. orders for preliminary action such as the move of advance parties or regrouped elements; and
- f. special administrative instructions, such as special equipment required, regrouping of A and B echelons, etc.
- 2. Based on the brigade warning order the squadron commander can make a time appreciation to determine:
 - a. how much time he will have to make his reconnaissance, plan, and issue his orders;
 - b. how much time he can give to troops to conduct their battle procedure;
 - c. when his troops must begin to move to the battle area and what tactical control measures will be necessary;
 - d. how troops under his command are likely to be grouped; and
 - e. the order in which his troops should arrive in the forward area.
- 3. This estimate will form the basis of his own warning order which will be issued as early as possible to the squadron.

311. Groups

- 1. Once the warning order has been passed, the remainder of the battle procedure is based on the formation of standard groups which are:
 - a. <u>The Reconnaissance Group.</u> (R Group) This consists of the squadron commander and those representatives of supporting arms whose technical advice he needs to formulate a plan. In addition, the squadron commander must have communications and it requires a protective element accompanying his R Group.
 - b. <u>The Orders Groups.</u> (O Group) This group consists of the R Group and other subordinate commanders, including those of supporting arms, who must receive and execute the squadron commander's orders.
 - c. <u>The Main Body.</u> The main body normally comprises the following:

- (1) <u>Harbour Parties.</u> These parties are drawn from the main body when required and consist of personnel who, will reconnoitre harbours, or other areas.
- (2) <u>F Echelon.</u> This includes the men, equipment and vehicles essential for combat.
- (3) A Echelon. This includes the men, vehicles and equipment for immediate battlefield support. It can be divided into A2 and A2 echelons. A1 echelon includes a small quantity of POL, ammunition and perhaps technical stores and technicians, which provides immediate battlefield supply and moves as closely behind F echelon as the action permits. A2 echelon provides resupply to A1 echelon.
- (4) <u>B Echelon.</u> This is the remainder of the administrative troop which holds commodities and resources not required immediately and controls activity not compatible with daily resupply.
- 2. A suggested composition of squadron R and O Groups is shown at Table 3-2.

312. Reconnaissance

- 1. It is evident that in most tasks a detailed recce of the area of operation will not be possible. However, all must be done by the squadron commander to obtain as much detailed knowledge as possible of the ground and the enemy prior to his appreciation and issue of orders. The squadron commander must develop the ability to analyse terrain at a glance and picture the battlefield from maps, air photographs, engineer "going" maps and other sources. He must actively seek any expert advice and make a reconnaissance plan to conduct as much prior reconnaissance as possible. To do so he must:
 - a. be certain of the aim of his reconnaissance;
 - b. make a time appreciation;
 - c. organize his R group and provide for its protection; and
 - d. consider the use of helicopters if available.

Group	Composition
Reconnaissance Group (R Group)	Squadron Commander Forward Observation Officer (FOO) Support Arms Commanders Diagram (FOO)
	Driver/Radio Operator Protective Party (if required)
Orders Group (O Group)	Squadron Commander R Group Battle Captain Troop Leaders Liaison Officer Administrative Officer Squadron Sergeant Major Fire Support advisors and other arms representatives Maintenance Warrant Officer (optional)

Table 3-2 Suggested Composition R and O Groups

313. Appreciations and Orders

- 1. <u>Formal Appreciations and Operations Orders.</u> The details of preparing a formal appreciation and written or verbal operations orders are contained in A-AD-121-C01/FP-000 (CFP 121(3)), Staff Procedures and Military Writing for the Canadian Forces. All commanders must be familiar with this process and should apply it whenever time permits.
- 2. The speed of battle often precludes the application of the complete process and thus commanders at all levels must be prepared to modify their actions when time and space dictate. A commander must never forget that those who need to know the most about an operation are those, commanders and troops, who will perform the task. They must also be given time to prepare and, to provide this time, certain other procedures may be adopted. These are:
 - a. the battle (quick) appreciation; and
 - b. the use of radio orders.
- 3. <u>The Battle Appreciation.</u> The consideration of all factors relevant to a particular situation is a lengthy process, which takes time. This is the one thing most often in short supply. On the other hand, to make a plan without considering the most important factors invites defeat. To overcome this difficulty, each leader must develop a rapid method for arriving at a sound decision.

4. Orders. Because of the decentralized character of the operations of the recce squadron, the initial orders of the squadron commander must be thorough and complete. His guidance must be clear and understood by all. Coordination and control measures must be particularly clear and simple. Examples of types of orders for common tasks are annexed to relevant chapters for guidance. The squadron, once launched on its mission, will be commanded and controlled by radio orders. Standard formats and SOPs will negate the need for lengthy radio transmissions, increasing both speed of execution and security.

314. Missions

- 1. The wording of the mission issued by brigade headquarters and subsequently passed to troops must be carefully considered. Vague statements such as "screen the advance", "provide flank surveillance", "conduct a sector reconnaissance" although common, are not explicit and may result in difficulty in the production of a plan which will provide the brigade commander with the required information. More appropriate direction would be:
 - a. provide 15 minutes warning of an enemy attack of company strength or larger;
 - b. conduct a route reconnaissance along axis ALPHA within the following limitations:
 - (1) check all ground which is within hand-held anti-tank range of the road, and
 - (2) search, by observation, ground which is within heavy anti-tank weapon range of the road;
 - c. determine the strength and disposition of enemy long range anti-tank weapons between "PRAIRIE STORM" and "RUNNING JUMP" within boundaries.

315. Application of Command and Control Principles

- 1. Command and control within the squadron must stress flexibility and the system of control must be adaptable to a variety of organizations and procedures. The following principles will apply:
 - a. The squadron commander will usually receive his orders in the form of an operational instruction specifying the mission and an outline for execution.
 - b. The method by which the squadron commander executes the mission is his responsibility, but in order to make a suitable plan he must be in possession of upto-date intelligence.
 - c. The basic element through which the squadron commander will exercise command and control is SHQ, and the vital link between the squadron

- commander and his sub-units is the radio. The squadron commander must avoid placing himself in a position that will require a radio relay to his sub-units. He must also ensure that he maintains radio contact with brigade headquarters.
- d. The attachment of the reconnaissance helicopters should not require special arrangement. The helicopters will operate on radio nets to each other and to the ground vehicles, and command and control is affected in the same manner as that employed with the other troops.
- e. In all cases the squadron commander will ensure that his sub-units are fully briefed on the mission, and any restrictions affecting its attainment. By so doing, he will minimize the amount of control required over reconnaissance troops and enable sub-unit commanders to operate in their areas of responsibility within the maximum freedom of action.

SECTION 3 - SQUADRON HEADQUARTERS PROCEDURES

316. General

- 1. SHQ provides the squadron commander with the necessary control facilities to permit him to exercise effective command of the squadron. The CP is the focal point and all activity in SHQ must be geared to the squadron's operation. In terms of numbers of personnel and vehicles, SHQ is small and should be kept that way. In battle it will be forced to move frequently, usually during the most hectic periods, either for reasons of security or to maintain communications. In order to function efficiently, detailed SOPs must be developed to coordinate the concurrent and interrelated functions in SHQ. The battle captain commands SHQ.
- 2. SHQ must provide operations, intelligence, liaison -and communications facilities continuously. In addition, it must provide for its own security, and reconnaissance for moves.
- 3. The points covered in this section should form the basis of SHQ sops.

317. Siting

- 1. In siting SHQ the location chosen should:
 - a. above all, provide good communications;
 - b. provide good ground and air cover;
 - c. provide firm ground for vehicles and adequate room for dispersion;
 - d. be accessible to the main axis; and
 - e. be defensible.

318. Command Posts

- 1. The two CPs must be kitted and prepared identically to permit control to shift smoothly from one vehicle to the other.
- 2. A basic crew in the control CP will be, as a minimum, a duty officer, a brigade net operator and a squadron net operator. This will require that the liaison officer, Ops Warrant Officer, Signals Sergeant, Intelligence Sergeant or as a last resort or the Administrative Officer be tasked as duty officers. The support troop leader may be available if his sections are grouped with reconnaissance troops.
- 3. The alternate CP performs the intelligence function when the two Us are co-located. However, it must be prepared to assume control during step-up procedures.

4. When a move of SHQ is required, the main CP. will continue controlling nets until the alternate is in its new location and has established communications. For moves, crews will have to be altered to ensure that both vehicles are compatible as outlined in paragraph 2.

319. Moves

- 1. Any move of SHQ must be done in such a way as to ensure the continuous operation of all functions. The following points must be covered fully in SOPs.
 - a. Moves must be anticipated, and a general location and selected alternates are chosen by the battle captain on consultation with the signal sergeant.
 - b. The control of the radio nets must pass smoothly from the main CP to the alternate CP after the latter has verified that it is in contact with all stations.
 - c. The move must be fast to permit SHQ to regroup and function normally as quickly as possible.
 - d. Handover of information from the new main CP to the alternate must be complete.
 - e. The move must be secure.
 - f. In high speed operations, such as a pursuit, this process may be continuous. On rare occasions the CP might be required to operate on the move.

320. The Intelligence Function

- 1. As noted earlier, the intelligence capability of the squadron is limited. Therefore a priority of tasks must be established. First priority tasks are:
 - a. pass information and NBC data to brigade headquarters;
 - b. collect and disseminate essential intelligence and NBC data to the squadron;
 - c. ensure that the squadron battle and NBC records, and maps are kept up-to-date;
 - d. acquire and distribute maps, air photographs and traces;
 - e. arrange for the disposal of captured documents, material and prisoners.

2. Other responsibilities are:

a. ensure that all squadron personnel are fully trained in the recognition of enemy equipments and uniforms, and know the enemy's unit-level tactics;

- b. prepare intelligence briefings as directed; and
- c. study the topography of areas where the squadron may be deployed and prepare going map.

321. The Operations Function

- 1. SOPs must establish procedures for the following:
 - a. <u>Radio Net Manning.</u> The battle captain or the liaison officer must be in the CP except during quiet periods when contact with the enemy is not imminent. The brigade and squadron nets should be manned separately and must be operated continuously.
 - b. <u>Maps.</u> All operational information must be plotted on the master operations map and on the information map in the alternate CP. Overlays can be used for fireplans, counter-attack plans, patrols, minefields, obstacles, etc.
 - c. <u>Logs.</u> Separate operations logs, must be maintained for the alternate CP.
 - d. <u>Message Handling.</u> An orderly system for receiving, actioning, and logging messages must be established. Relevant information must be extracted and displayed on the appropriate map or overlay.
 - c. <u>Battle Boards.</u> These must be maintained in each CP to display net diagrams, log files, reports, messages, groupings, vehicle states, etc.
 - f. <u>Documents.</u> Copies of brigade and regimental SOPs, operations plans and orders, etc. must be available in both CPs.
 - g. <u>Security.</u> Procedures must provide for the destruction of classified materials in case of capture of the CPs.

(322 to 399 inclusive: not allocated)

CHAPTER 4

PHASES OF WAR

SECTION 1 - GENERAL

401. Scope

The scope of this chapter is to define the threat and the major tasks applicable to the recce squadron in each of the three phases of war under conditions of nuclear threat and, to discuss the use of the squadron under conditions of low intensity conflict as defined in ABCA armies' Operational Concept 1986-95. Counter-insurgency and peacekeeping missions are not included; however, internal security operations are partially covered in Chapter 10 of this manual and the procedures and tasks therein are applicable, with intelligent interpretation, to these two types of low intensity conflict.

SECTION 2 - DEFENSIVE OPERATIONS

402. General

- 1. ATP 35 ("Land Force Tactical Doctrine") defines the concept of operations for NATO countries at formation level and, in particular, Chapter 2 deals with defensive operations.
- 2. Therein, conditions of defence are based on the threat of enemy attack and the commander's aim in preventing, resisting or destroying this attack. His approach will doubtlessly influence the tasking of the recce squadron and, therefore, it is important to consider the aim of this defence which might be:
- a. denying the enemy entry into an area;
- b. destroying, canalizing, or containing the enemy force;
- c. reducing enemy capacity for offensive action;
- d. developing more favourable conditions for offensive operations by friendly forces; or
- e. economizing force in an area in order to apply decisive force elsewhere.
- 3. Whether the defence is positional or based on mobility within the brigade sector, the first fundamental of defence is intelligence. The limited dedicated intelligence gathering agencies in the brigade, and the ability of the reconnaissance squadron to rapidly obtain tactical information of immediate importance, will normally dictate the primary task of the squadron: that of providing a screen forward of the FEBA.
- 4. At bde level however, the commander's scope is more limited and will normally be reduced to the first three aims listed in art 402.2. This implies that the information produced by the recce squadron must be pertinent to this aim. Most of this information will be based on the enemy since he has the initiative of time and place. The aim then is to define the threat to the brigade presented by an attacking enemy.

403. Enemy Organization of the Offensive - The Threat

- 1. Enemy forces intend to advance rapidly, locate gaps and weak points in the defence, mass quickly and penetrate to deep objectives. In general terms, both motorized rifle and tank divisions will advance on a wide front of up to 30 kilometers. The organization for the advance will normally be:
 - a. reconnaissance elements;
 - b. advanced guards;

- c. main body; and
- d. rear guard.
- 2. Figure 4-1 displays this organization diagramatically and shows possible major equipments in each group.

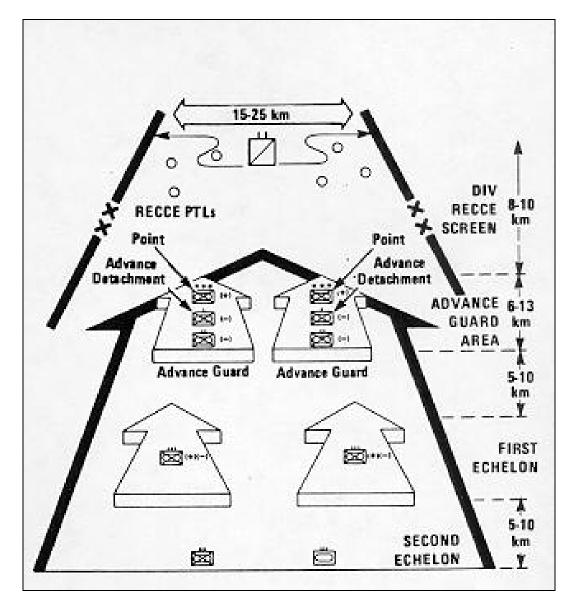


Figure 4-1 Possible Enemy Organization for Offensive Operations

404. Enemy Reconnaissance Screen

- 1. The reconnaissance screen is based on the divisional reconnaissance battalion which operates eight to 10 kilometers ahead of the point platoon of the advance guard. It can be expected that the screen will be reinforced with artillery, engineers, chemical and radiological survey detachments.
- 2. The battalion reconnoitrers forward of the divisional advance guard with first echelon regiments orienting on the division's primary avenues of approach. It normally operates across the entire divisional front, however, it might employ most of its resources to clear the routes that are to be used by first echelon regiments. The long range company might infiltrate patrols, by air, deep into our rear areas with the mission of locating reserves or nuclear delivery means. The radar reconnaissance company is usually employed directly behind the combat units of the first echelon and is assigned radio intercept and direction-finding tasks.
- 3. <u>En Screen Tactics.</u> Typical of classical Warsaw Pact (WP) tactics is the following screen scenario. One reconnaissance group comprising several patrols is allocated to each divisional route of advance. Each group is assigned successive objectives along its route. As each objective is secured, a reconnaissance base is established. Reconnaissance patrols are then deployed forward of the base toward the next objective. The patrols reconnoitre by rapid and frequent movement from one vantage point to another. They cross open areas at high speeds and cross close and broken terrain by bounds. OPs are established at vantage points. When contact is gained, this reconnaissance group will use feints and flanking manoeuvres to determine the defender's strength, composition and disposition. The reconnaissance group will report and attempt to bypass the defender's locations which will then be saturated with artillery fire and attacked by the advance guard. If resistance is not intense, a reconnaissance group may be left in contact to create a diversion while the division's advance guard and main elements bypass. The basic purpose of the enemy's reconnaissance is to find the defender's flanks and weak areas so that the main body can quickly bypass resistance and continue the advance.

405. Enemy Advance Guards

- 1. The advance guard normally moves eight to 10 kilometers behind reconnaissance battalion patrols. Its mission is to respond to contacts made by the screen. In either a tank or motorized division, the advance guard is normally a reinforced battalion. The reinforcements are normally a tank company, artillery, engineers and air defence artillery. It attacks to destroy opposition encountered by the screen. It is centrally located and advances in columns which provide speed, depth and the ability to deploy quickly in any direction.
- 2. Figure 4-2 shows the grouping of a typical enemy advance guard.

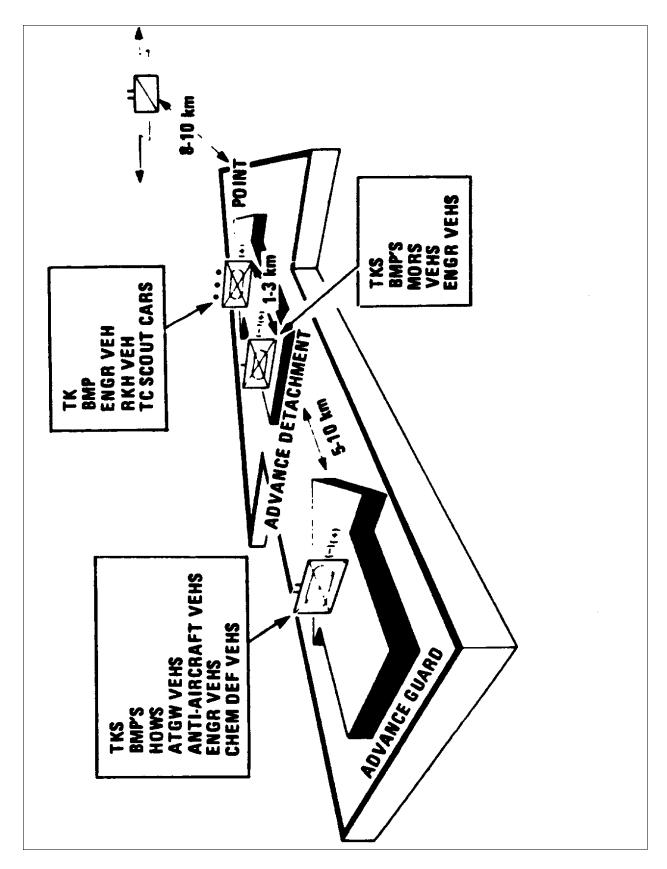


Figure 4-2 Possible Divisional Advance Guard

- 3. Advance guard tactics are designed to rapidly build up an overwhelming tank force to push through opposition or to cover the manoeuver of the division. The build up is by stages. The first stage is a reinforced platoon, followed by its parent reinforced company, in turn followed by the remainder of the reinforced battalion. In detail, the sequence followed could be:
 - a. Once the reconnaissance battalion has located or has been halted by opposition, the point platoon of the advance guard attacks to destroy that force.
 - b. If the point platoon is halted, the platoon's parent company (forward security for the advance guard) attacks.
 - c. If the lead company is halted, then the remainder of the battalion will attack from march column.
 - d. If the battalion is unsuccessful, it will establish a hasty defence as close to the defender as possible and await the arrival of the first echelon's motorized rifle regiments.

406. First Echelon Forces

- 1. The first echelon of a motorized rifle division normally consists of two motorized regiments moving abreast. In a tank division, two tank regiments move abreast. The first echelon contains most of a division's combat power. Each regiment moves in column. If the division does not employ a reconnaissance screen each regiment forms its own. In this case, screening is done by the regimental reconnaissance company which might be comprised of:
 - a. a headquarters section;
 - b. one tank platoon;
 - c. one amphibious armoured reconnaissance platoon;
 - d. one motorcycle platoon; and
 - e. one chemical reconnaissance platoon.
- 2. This company reconnoiters forward of the regimental advance guard along the regiment's primary route of advance. Its organization for combat and tactics parallel those of the reconnaissance battalion. If the division does employ the reconnaissance screen and an advanced guard, then the regimental reconnaissance company might move as part of the main body of the regiment in anticipation of early committment when the regiment is deployed. Reconnaissance patrols from the company may be employed to screen an exposed flank along the regiment's route of advance.

3. In the absence of a divisional advance guard, the regiment will normally employ its own. In a motorized rifle regiment, this consists of a reinforced motorized rifle battalion subdivided into an advanced detachment which furnishes a point, and a main guard. Its mission and tactics normally correspond to the advance guard mission given the tank battalion discussed in article 405.1.

407. Second Echelon Forces and Reserves

- 1. <u>Second Echelon.</u> The second echelon of a motorized rifle or tank division consists of the remaining tank and motorized regiments. The second echelon is committed to maintain the momentum of the attack by:
 - a. reinforcing the first echelon;
 - b. conducting a flank attack;
 - c. reducing pockets of resistance; or
 - d. replacing 1st echelon when strength reaches 50 per cent.
- 2. <u>Divisional Reserves.</u> The division might maintain reserves to follow closely behind the second echelon regiments. These are normally poised to exploit any success, repel enemy counter attacks, repulse enemy landings or guard the flanks of the advance.

408. Squadron Tasks in the Defence

- 1. Because of this threat to the brigade it is evident, that the commander will require extensive information on the attacking enemy. The recce squadron is well equipped to provide him immediate tactical information and should be primarily employed in forming a screen on the enemy side of the FEBA. However, the scope of employment is not all restrictive and, depending on the threat, concept of operations, the strength and missions of divisional and corps covering forces, and the state of preparedness of the brigade, the squadron could also be tasked with any of the following:
 - a. form a guard if reinforced;
 - b. provide flank surveillance, or if reinforced, a flank guard to cover gaps between brigade sectors or between battle groups in the brigade sector;
 - c. conduct reconnaissance of counter-attack or blocking force routes;
 - d. conduct rear area security tasks;
 - e. conduct radiological or chemical survey; or
 - f. provide traffic control for the withdrawal of higher formation covering forces through the brigade sector.

2.	The planning and execution of these tasks will be dealt with in following chapters.

SECTION 3 - OFFENSIVE OPERATIONS

409. General

- 1. The brigade will engage in offensive operations to accomplish one or more of the following aims:
 - a. to destroy, repulse or wear down enemy force;
 - b. to capture or gain ground;
 - c. to gain information;
 - d. to deprive the enemy of his resources; or
 - e. to divert the enemy's attention from other areas or activities.
- 2. The types of offensive operations at brigade will consist of the advance to contact and the attack, be it quick or deliberate. The reconnaissance squadron should be employed during the advance to provide close reconnaissance forward of the brigade, to find routes around delaying positions, normally based on obstacles, to maintain contact with flanking forces and to picket by-passed enemy positions. In the attack itself the squadron can provide early warning on the flank or plus of the objective and resume its screen function during the reorganization. The enemy concept of defensive operations is the single most important factor in considering the best task to be performed by the squadron and therefore his doctrine bears examination.

410. Typical Enemy Organization of the Defence

- 1. Although the Soviets believe that attack is the best form of defence, they recognize that tactical defence will occasionally be necessary. Thus defence is recognized as a temporary expedient in order to gain time or create conditions favorable for resuming the offensive.
- 2. Defences are based on a series of firmly held and well dug-in company level motor rifle strong points heavily supported by artillery, aircraft firepower including chemical and nuclear strikes. This is backed up by a strong, mobile, tank heavy second echelon for counter penetration/counter attack.
- 3. The division will organize itself into a covering force (with the possible addition of army or front reinforcements) and a main defensive zone consisting of a series of mutually supporting, self-sufficient, company-sized positions deployed in depth. Strong, mobile, tank-heavy reserves are retained as counter-attack forces in second echelon. Figure 4-3 illustrates a typical WP divisional defensive layout.

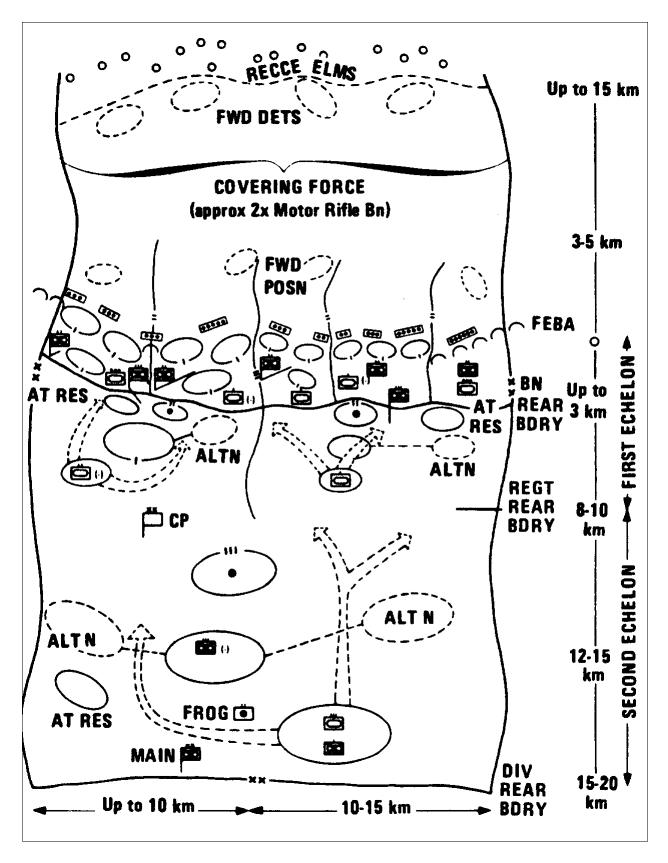


Figure 4-3 The Motor Rifle Division in the Defense

411. An Example of the Motor Rifle Regiment in the Defense

- 1. The first echelon motor rifle regiment defends the forward 8 to 10 kilometers of the divisional defensive zone. The regiment normally deploys with a guard force of approximately two companies from the depth battalion, a first echelon of approximately two motor rifle battalions, and a second echelon consisting of the depth battalion, armour and artillery support and a mobile anti-tank reserve. As with the division, the motor rifle regiment relies on mutually supporting company sized positions, in depth, supported by mobile tank and anti-tank forces and by artillery. Figure 4-4 illustrates the schematic layout of the motor rifle regiment in the defence.
- 2. The motorized rifle regiment begins its defensive actions when the enemy reaches its guard force's location. As the attacking forces move within range they are engaged by mortars, tanks and anti-tanks weapons, machine-guns and small arms. Artillery engages the enemy and covers the withdrawal of this guard force.
- 3. Defending battalions remain in place until overrun or ordered to withdraw. Occupation of alternate and secondary defensive positions is, however, a normal tactic within a battalion. Local counter-attacks and counter-penetration actions by small tank forces and BMP's maintain the integrity of its area of responsibility. Tanks are dug in to within 600 m of the defensive line but are prepared to move forward to assist a hard pressed defence.
- 4. Penetration of the first echelon battalion is blocked by second, echelon forces. If this fails a divisional level counter-attack by the tank regiments into or through the motor rifle regiment's sector is executed.

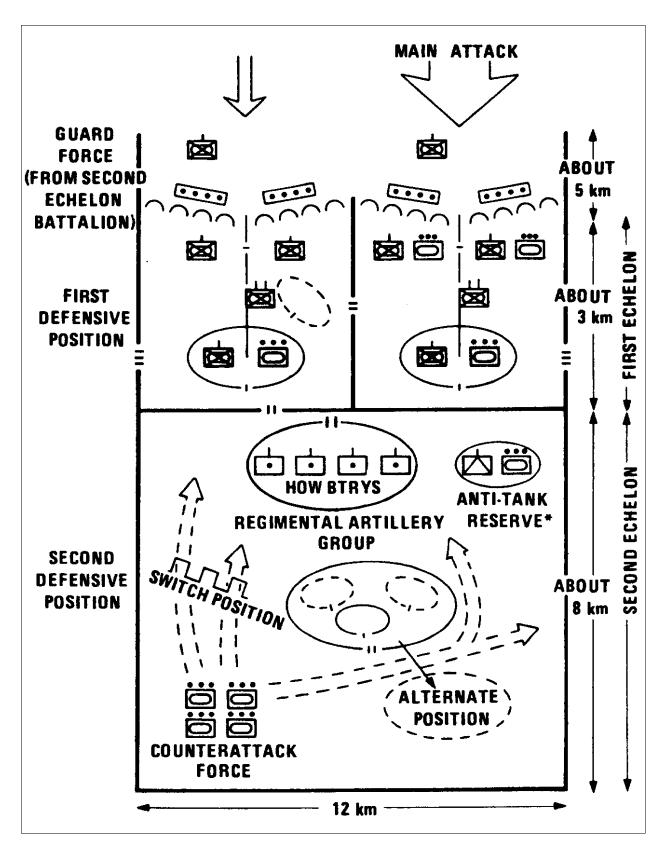


Figure 4-4 First Echelon MRR in the Defence

5. The WP armies, like our own, make use of natural anti-tank obstacles around which they establish their defensive positions. Minefields will be the predominant form of artificial obstacle. Due to the limitations of manpower these should normally be restricted to the main approaches. The Soviets may use remotely detonated and air delivered mines. In addition, nuclear, chemical and biological weapons will be widely used when WP countries adopt a defensive posture.

412. RECCE Squadron Tasks in Offensive Operations

- 1. The brigade commander's priority of concern will dictate the tasks to be assigned to the recce squadron. However, the squadron is designed to meet the following priority of tasks:
 - a. locate and pass back information on the enemy and the ground ahead of the brigade;
 - b. find and provide information on gaps in enemy defensive positions; and
 - c. picket by-passed enemy positions until relieved by follow-up troops.
- 2. Other tasks that could be assigned to the squadron are:
 - a. to provide flank surveillance or, if reinforced, a flank guard;
 - b. to provide manning of junction points between brigades;
 - c. reconnaissance of the area between two battle group axes;
 - d. to provide the control organization for the brigade at obstacle crossings;
 - e. provide early warning of enemy counter-attack or counter-penetration, during the deliberate attack and upon reorganization; and
 - f. provide security at key points along an axis of advance.
- 3. The planning and execution of these tasks will be covered in subsequent chapters in relative detail. Suffice it to say that the squadron commander must, as a minimum, obtain enough precise direction from the brigade commander as to the threat, the degree of warning required, the strength of forces to be by-passed and the intended overall rate of advance of the operation if he is to proceed with any amount of intelligent planning for whichever of the above tasks he is to execute.

SECTION 4 - RETROGRADE OPERATIONS

413. General

- 1. Retrograde operations are those involving any movement to the rear, or away from the enemy. This decision might either be forced upon the commander by enemy actions or made voluntarily to reorganize or deceive the enemy. These may be classified as withdrawal, retirement or delaying operations.
- 2. The brigade can become involved in any one of these actions and the squadron commander must understand his role and possible tasks in each. ATP-35 defines the three types of actions as follows:
 - a. <u>Delaying Operations.</u> "Delaying operations are those in which a force trades space for time, slows down the enemy advance inflicting maximum casualties without becoming decisively engaged. A delaying force maintains continuous contact with the enemy. Delaying operations can be conducted in any phase of war." These operations, carried out by a covering force normally consisting of higher formation combat and recce units, do not exclude the possibility of the brigade carrying out such actions to cover the withdrawal of a higher formation or being actually tasked with the provision of a covering force in a defensive battle.
 - b. <u>Withdrawal.</u> "A withdrawal occurs when a force under pressure disengages from an enemy force in accordance with the will of its commander. It seeks to break contact with the enemy."
 - c. <u>Retirement.</u> "A retirement is a rearward movement by a force which is out of contact with the enemy. It is administrative in its execution."

414. The Threat

- 1. The WP threat of an attacking division and its elements, as described in articles 402 to 409, remains the primary concern, especially in the withdrawal. It could, however, be further complicated by other circumstances under which the retrograde operation has to be carried out.
- 2. <u>Delaying Operations.</u> If the brigade is used to provide the covering force for a higher formation's withdrawal, the following should be considered:
 - a. enemy recce elements which must be destroyed or as a minimum prevented from maintaining contact with the main body;
 - b. the enemy advance guard which must be neutralized and first echelon divisional forces forced to commit themselves prematurely;
 - c. obstacles, critical points, defiles and routes to the rear that must be kept clear of

- elements such as enemy recce or airborne troops, saboteurs and refugees;
- d. enemy flanking formations which must be prohibited from bypassing, cutting off delaying forces, and disrupting the withdrawal.
- 3. <u>Withdrawal Operations.</u> If the brigade is to execute a withdrawal itself, it should normally be organized into a main body, a rear guard, flank protection elements and a force for the occupation of intermediate positions. The aim, then, is to disengage the bulk of the brigade from the enemy. The enemy's aim in these circumstances would be to attempt to pursue the brigade, by-pass its rearguard and disorganize its withdrawal by isolating and neutralizing its elements and capturing key points in depth along the route and destroy it as a fighting formation.
- 4. If the enemy suspects a withdrawal, the brigade can expect the following:
 - a. close follow-up by motor rifle forces;
 - b. numerous probes by recce elements to find and secure by-pass routes;
 - c. increased neutralization of key terrain such as defiles and river crossings by artillery and tactical air;
 - d. an attempt to overtake retreating columns with tank forces penetrating rapidly on parallel routes. These forces would attack us from the flank and attempt to cut us off and destroy us piecemeal;
 - e. use of parachute and heliborne troops and forward detachments to block or delay us at defiles, river crossings and other key points to allow their main tank thrust to catch up;
 - f. sabotage and disruption of our lines of communication in depth; and
 - g. intense EW activity to disrupt our communications.

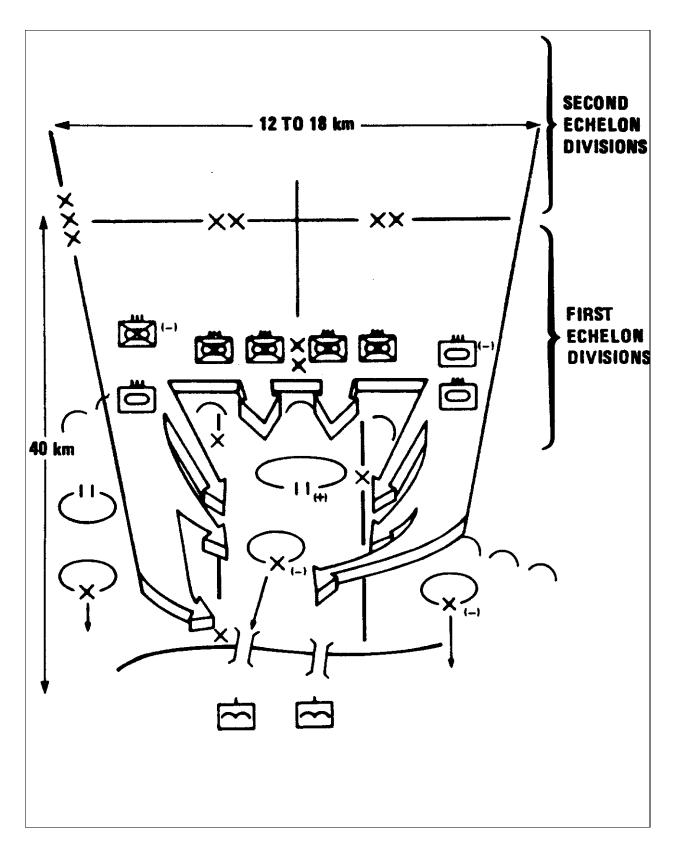


Figure 4-5 Possible Threat to Brigade Withdrawal

415. RECCE Squadron Tasks in Retrograde Operations

- 1. During retrograde operations the threat appears throughout the brigade area and particularly at defiles, cross roads, bridges, etc.
- 2. In an operation of this type then, the reconnaissance squadron could be given the following tasks:
 - a. flank surveillance or guard if reinforced;
 - b. surveillance of key defiles and crossings along the withdrawal routes;
 - c. surveillance or protection of intermediate positions;
 - d. reconnaissance and surveillance of main withdrawal routes;
 - e. liaison for passage of lines;
 - f. command and operate as part of a rear-guard;
 - g. provide traffic control at key points;
 - h. provide rear area security, especially for withdrawal routes;
 - j. recce and surveillance of new locations; and
 - k. provision of a screen ahead of the new location.
- 3. Throughout, it is important to remember that in this type of operation the reconnaissance squadron is primarily suited to surveillance. In addition, its mobility, communications and support troop, may permit it to man and execute demolitions as part of the obstacle plan. Patrols can observe the obstacle and cover it by means of indirect fire support. This ability is limited only by size and lack of firepower.

SECTION 5 - NIGHT OPERATIONS

416. General

- 1. Reconnaissance operations are slower and less effective at night. The new generation of radar and night observation devices increase surveillance capability but mounted reconnaissance at night remains for the moment very hazardous and relatively ineffective. Given favourable terrain and routes, and maximum ambient light, it may be possible to employ ground reconnaissance vehicles and helicopters at night against a disorganized enemy.
- 2. The primary method of night operations for the reconnaissance squadron, however, remains the establishment of a surveillance line consisting of from nine to 20 observation posts (OPs) to observe various key access points into the brigade area and, through the use of radar and active foot patrolling, the reconnaissance and surveillance of critical approaches or areas, in depth. It must be noted twenty (20) OPs can only be manned for very limited periods.
- 3. A high degree of proficiency in night operations, in all likely tasks, is the hallmark of a well trained squadron since night and poor visibility provides more scope for the use of stealth and deception techniques and thus provides a greater challenge to the reconnaissance commander. Night operations are physically trying on an organization of this size and improvements in techniques and equipment for fighting at night will call for increased stamina and efficiency on the part of every reconnaissance soldier.

417. Night Observation and Surveillance Equipment

- 1. The reconnaissance squadron is equipped with night observation devices and surveillance radars. All of this equipment is line of sight and susceptible to obscuration by smoke and fog. The important thing to remember, however, is that these equipments only extend the capability of the human eye and ear in conditions of darkness and poor visibility.
- 2. The sighting and selection of alternate positions for active devices is paramount since the security of a position is compromised when these devices have been used.
- 3. Night observation devices such as the screw served weapon sight, the goggles and other squadron devices, greatly enhance the ability of the squadron to move at reduced rates at night or in conditions of limited visibility, but their prime use should be to improve visual surveillance from the OP onto the observation target and to assist the foot patrols in carrying out their reconnaissance. As the range and scope of observation increases with passive devices, the squadron will operate mounted more extensively by night and relinquish active devices.

418. Night Operations - The Threat

1. The Soviet army is well trained in night operations and their doctrine recognizes little or no difference between their tactical methods by day and by night. Soviet units are equipped with a wide range of devices to aid in night fighting, including gun laying telescopes, night viewing

devices and driving aids.

- 2. Soviet forces, normally launch deliberate attacks a few hours before first light to permit daylight exploitation of success. Manoeuvre is kept simple and several infantrymen are allotted to each tank to assist in navigation and anti-armour protection. When the situation permits, white light is used to context night attacks, assist the attackers and blind the enemy defence.
- 3. To repel covering attack and counter-attacks at night, Soviet Forces intensify reconnaissance and surveillance to the front and flanks and thoroughly plan the illumination of likely counter-attack approaches as well as provide normal battlefield surveillance.

CHAPTER 5

RECONNAISSANCE OPERATIONS

SECTION 1 - GENERAL

501. Scope

- 1. This chapter covers those operations wherein the reconnaissance squadron seeks out and reports on the enemy and on the terrain. It will cover route, sector and area reconnaissance by dealing, in turn, with the most common factors required for planning in order to provide the squadron commander with guidelines for the execution of these tasks. In addition, the employment of supporting arms mainly helicopters, artillery and engineer reconnaissance will be considered throughout.
- 2. Annexed to each reconnaissance mission, as a guide, will be an aide-mémoire for orders as follows:
 - a. Orders for a Route Reconnaissance Annex E.
 - b. Orders for a Sector Reconnaissance Annex F.
 - c. Orders for an Area Reconnaissance Annex G.

502. Categories of Reconnaissance

- 1. <u>Route Reconnaissance.</u> The purpose of a route reconnaissance is to obtain specific information on the route, obstacles, enemy and adjacent terrain which could affect movement along the route. Dependent upon the phase of war and the mission given to the squadron commander, it may be necessary to emphasize the reconnaissance of the enemy over that of the terrain. This degree of coverage must be as clear as possible in commanders' minds, at all levels.
- 2. <u>Sector Reconnaissance.</u> A sector reconnaissance is a directed effort whose objective is to obtain information on all routes, type of ground and enemy forces in a given corridor. This corridor is defined by a set of boundaries which follow ideally, easily recognizable features such as roads, streams, bridges or ridge lines.
- 3. <u>Area Reconnaissance.</u> This operation involves the gathering of information on routes, ground and the enemy in the immediate vicinity of specific points of interest such as towns, woods, bridges, crossing sites.

503. Degrees of Search

- 1. <u>Normal.</u> This implies that only the ground affecting movement along an axis is searched. Unless directed otherwise, this involves checking laterals and dominating ground out to the distance from which direct fire can be brought to bear on the axis.
- 2. <u>Intensive.</u> Entails total coverage of all ground within a specified area and is extremely time consuming.

SECTION 2 - ROUTE RECONNAISSANCE

504. General

- 1. A route reconnaissance may be conducted in any phase of war and for various reasons, for instance:
 - a. Reconnaissance of a major axis in a brigade advance.
 - b. Reconnaissance of major withdrawal routes.
 - c. Reconnaissance of major counter-attack routes.
- 2. It can be seen even from these three examples that, although the information required is similar, the priority and pertinence of the various types of information will vary in accordance with the overall aim or, specifically, the use of the route to be reconnoitred.
- 3. Route reconnaissance may be oriented on a road, an axis, or general direction of advance. A reconnaissance squadron could efficiently reconnoitre up to two routes if they are parallel and in reasonable proximity, but can handle up to three in an emergency for short periods. This permits the squadron better coverage of the route while maintaining a reserve for the picketting and by-passing which are inevitably required.

505. Planning of a Route Reconnaissance

- 1. <u>Factors.</u> Once the squadron commander has received his warning order, he should begin to consider his likely tasks. If the warning order contains indications that the task might include a route reconnaissance, a preliminary map study by the squadron commander will speed up his battle procedure. If the tasking for a route recce is only given later, the following factors must, nevertheless, be considered:
 - a. Aim
 - (1) commander's aim and squadron task,
 - (2) number of routes to be reconnoitred,
 - (3) rhythm or rate of advance,
 - (4) by-pass and picketting policy,
 - (5) degree of search,
 - (6) EEIs;

b. <u>Enemy</u>

- (1) likely locations or approaches of enemy conventional forces, saboteurs, obstacles and possibly even refugees,
- (2) type of likely enemy forces to be encountered,
- (3) air threat,
- (4) NBCW threat,
- (5) enemy activity and disposition leading to the required degree of search as well as possible enemy counter-moves,
- (6) EW threat;

c. Ground

- (1) the going must be considered in light of the numbers and types of vehicles to which the route must cater as well as to the method of movement of the formation,
- (2) obstacles such as towns, woods, hills, water obstacles that are likely to impede progress along routes,
- (3) likely enemy approaches should be examined, especially lateral routes giving easy access onto selected axis (as required or directed),
- (4) dominating terrain must be reconnoitred to at least hand held antitank weapons range and ideally more (2000 to 3000 m),
- (5) possible alternate routes;

d. Own Troops

- (1) tasks of following battle groups and their areas of interest,
- (2) route of advance of the brigade as a whole,
- (3) lateral liaison and contact points with flanking formations if any,
- (4) support available, primarily, helicopters, artillery, engineer and tactical fighter aircraft,
- (5) condition previous employment, and location of elements of the squadron,

- (6) any timed or programmed friendly fire support,
- (7) hand-over of contacts to follow-up battle groups;

e. <u>Weather, Time and Space</u>

- (1) day or night rate of advance,
- (2) effects of time and weather on visibility and going, and
- (3) any timings or rates imposed from higher commanders and their effects on the thoroughness of search.
- 2. <u>The Plan.</u> The squadron commander, having considered the factors and reached the relevant conclusions, must follow through his battle appreciation (see Annex E) and arrive at a plan. The tasks for his troops can be deduced from this appreciation and will certainly vary with the factors mentionned. However, the following considerations or guidelines might assist him in his plan as might the format for orders for a route reconnaissance attached at Annex E.
 - a. the squadron comander normally designates one troop per route or axis to be reced. As a rule, on a single route the recet troop frontage extends to include all ground from which direct fire can be brought to bear on the route;
 - b. he should attempt to maintain a reserve of one recce troop;
 - c. he must specify action on contact, by-pass and picketting policy;
 - d. he specifies the route to be followed and gives guidelines as to alternates;
 - e. he should, if possible, give a priority of tasks to his reserve troop;
 - f. he distributes his helicopters, engineer, recce and support troop elements in accordance with the priority of his tasks. In extreme cases his only reserve might be elements of his support troop or a helicopter section;
 - g. he plans the moves of SHQ with his Battle Captain and gives guidelines for service support to his Administrative Officer. He might be required to liaise with follow-up formations and service battalion for added support in this regard;
 - h. he produces the squadron trace for the reconnaissance to be carried out (See Figure 5-1); and
 - j. specifies guidelines as to reporting, particularly in regard to methods, priority of information, and breaking of radio silence.

506. Execution of a Route Reconnaissance (Figure 5-1)

- 1. The route recce used as an example and being conducted along route HEART in support of a brigade advance against an enemy flank is being done with two recce troops up, each with a section of helicopters. Their axis is on either side, but exclusive of the main route. These troops precede the remainder of the squadron and relay information on the ground and enemy presence along their respective axes. They also provide information on bypass routes from the main axis.
- 2. Their routes include the reconnaissance of woods, hills and towns dominating the route. The degree of search for each depends on the squadron commander's appreciation and orders.
- 3. In first troop's area a contact point is to be manned. This could be done either by a patrol from first troop, one from third troop progressing along the axis or by the squadron LO.
- 4. The third troop with most of support troop is progressing along the axis. This axis is exclusive to both first and second troop. Depth is thus obtained but reserve as much as marginal. A form of reserve results from the dispatch of third troop to continue along first or second troop axis, leaving the route itself to the support troop.
- 5. Critical points such as crossings of the MUHR and dominant ground must be reconnoitred. It is normally policy to by-pass towns although the town of BREITENBACH might prove a defile and strong point and its reconnaissance must be foreseen.
- 6. In this case, indications are that the bridge designated as Pogo 17 might be useable by the brigade and consequently the engineer recce party has been attached to second troop.
- 7. As this is a daytime reconnaissance, the helicopters are attached to the lead troops to provide additional rapid coverage. The helicopter section with first troop is given the additional task of being prepared to cover exits from main towns along HEART as required.
- 8. In regard to helicopter tasking, the squadron commander must liaise with the recce flight commander throughout the route recce and weigh carefully the tasking and use of his helicopters. In addition, in this case, he may find the troop which is travelling along the axis getting behind and may wish to allocate one or more sections of helicopters to speed up this troop. He must also consider use of the helicopters' greater field of observation for observing along lateral approaches (ie, SE from POGO 12).
- 9. He may also wish to allocate elements of support troop to each recce troop and task the proving of the route to one of first or second troop thereby leaving third troop in reserve.
- 10. He may wish in his orders to qualify Pogo 36 as an initial objective to phase the reconnaissance. This objective would be a command and control measure rather than an objective per se. Command and control measures, however, must not be so numerous as to clutter the maps of the recce troops and a careful balance between the requirement for these and for the

protracted use of maps must be maintained.

11. The need for the sending of formal route recce reports and their consumption of air time should be examined and SOPs defined to restrict these reports in time and content to the pertinent data. Written reports can be submitted by troop leaders following the task.

REMEMBER THE AIM IS TO RAPIDLY PROVIDE INFORMATION ON THE ENEMY AND THE GROUND ON AND ABOUT THE ROUTE

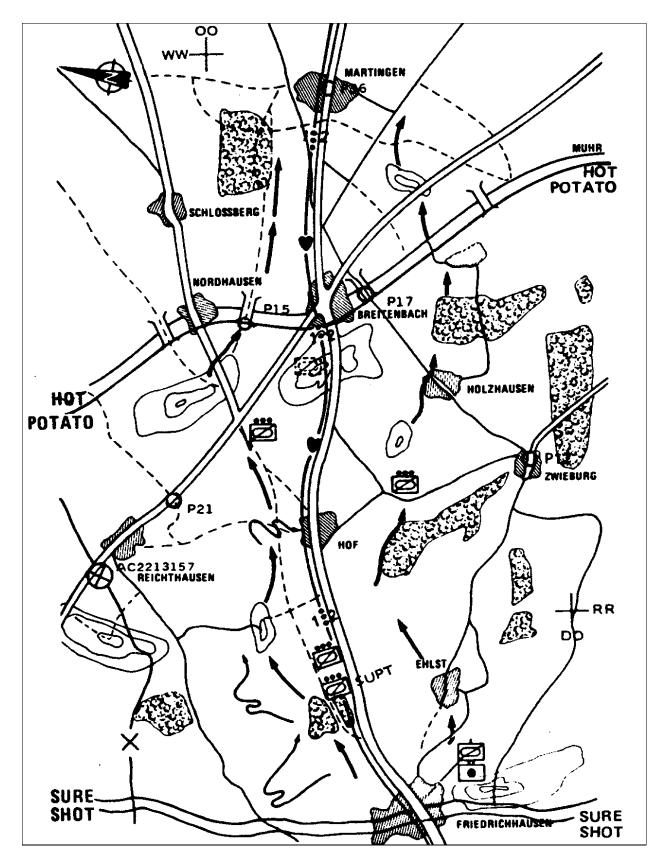


Figure 5-1 Route Reconnaissance

SECTION 3 - SECTOR RECONNAISSANCE

507. General

- 1. The aim of the sector reconnaissance is to obtain information on the enemy and ground along a corridor which typically encompasses the frontage in advance of the brigade. A sector reconnaissance may also be conducted in other phases of conventional war or in limited conflicts, but the tactics of employment and organization herein stated will apply in most cases.
- 2. A complete sector reconnaissance, if intensively carried out, is a very time-consuming operation.
- 3. As a guide, in an advance, the reconnaissance squadron will carry out a reconnaissance on one or more routes to permit the brigade to advance rapidly and should carry out a sector reconnaissance once relatively stiff resistance (ie, greater than company strength) is encountered.
- 4. Often, the demands of coverage over a wide frontage and the degree of search will require that squadron resources all be deployed forward. In this case a clear by-pass policy is required as well as close liaison with the follow-up battle groups to hand over picketting responsibility as early as responsible. Guidelines for this procedure should be spelled-out in squadron orders and coordinated by the OC/Battle Captain/LO with follow-up battle groups.

508. Planning a Sector Reconnaissance

- 1. <u>Factors.</u> Like any reconnaissance operation, planning begins upon receipt of the brigade warning order. The factors to consider are generally the same as mentioned in art 504.1. The main differences are:
 - a. <u>Aim.</u> The degree of search is more closely tied to the rate of advance required by the commander's aim.

b. <u>Enemy</u>

- (1) the entire sector will be reconnoitred. The expected type of enemy will influence the degree of search,
- (2) in a sector it is normal to specify certain Essential Elements of Information (EEIs) which the brigade SO_2 INT would issue prior to the operation. These are normally issued to key reconnaissance personnel with the aim of discovering or confirming the enemy organization and deployment;

c. Ground

(1) under this heading as well, certain EEIs may be specified. It is particularly important to attempt to define any tracks or indicators of past presence or

- usage of terrain by the enemy,
- depending upon the aim, rate of advance, degree of search for troops and expectations of enemy resistance, it will be important to specify actions in regard to towns and woods,
- (3) all obstacles, both natural and artificial, must be identified (within boundaries), their limits defined and points of crossing, breaching or bypassing determined;

d. Own Troops

- (1) here lateral liaison and contact points are important between troops and with flanking formations. Coordination of these points should be given in orders in regard to timings, frequencies and locations,
- (2) helicopters, a support troop section and engineer recce are normally provided to the troop leader so that he might more rapidly carry out the reconnaissance,
- (3) a continuous fire support program (CFSP) must be developed with the FOO. He will normally be located at SHQ where he will have best communications with all elements,
- (4) by-pass, picketting policy and liaison with follow-up troops is most important since the squadron will have little or no reserve;

e. Weather, Time and Space

- (1) The thoroughness required of a sector reconnaissance normally limits the usefulness of this type of reconnaissance at night. If undertaken, a large amount of information will have to be obtained on foot.
- (2) At night or in bad weather, the use of night observation devices, and of surveillance equipment moving from high point to high point, might improve the early warning aspect of the sector recce. This use of radar might seem time-consuming and of marginal accuracy but should not be discarded. It is of special value on the flanks to screen approaches into the sector.
- (3) The "timings versus thoroughness" appreciation becomes important at all levels and intelligent direction must be given.
- 2. <u>The Plan.</u> The squadron commander after conducting a battle appreciation will arrive at a plan. The factors and their conclusions will naturally dictate this and the various tasks required of

the squadron. As a guide, however, the following points of consideration and the orders format at Annex F indicate an approach:

- a. the area is broken into troop sectors which might vary from 2000 to 4000 meters in frontage;
- b. if contacts are expected to be small and widely dispersed, the squadron commander should maintain a reserve since his elements might soon be reduced through picketting. If wide coverage in search of more serious contacts is required, he will often have to deploy all sub-units of the squadron simultaneously;
- c. the squadron commander must specify the policy as to by-passing, picketting, junction points and critical points in the respective zones; and
- d. he must be flexible in his tasking of helicopters and might wish to maintain at least one section in reserve if all of recce flight is available. "Notice to move" is a practical control measure to use (ie, "one section in reserve at 10 minutes notice from SHQ.")

509. Execution of a Sector Reconnaissance (Figure 5-2)

- 1. The sector recce being conducted in Figure 5-2 is done with three troops up each with a section of helicopters and a section of support troop.
- 2. Various control measures have been identified such as report lines, inter-troop boundaries, junction points and reference points. Some arty targets have been inserted at key areas. The squadron commander has been tasked to reconnoitre the sector within boundaries during this first light advance to contact and told that enemy concentrations of company size, part of the forward positions of the security zone, are expected. The brigade has moved through a heavily forested area during the night, encountered light reconnaissance elements, and is expected to continue advancing against what appears as a flank of the Warsaw Pact motor rifle regiment in a prepared defence facing West. Therefore, the purpose is to determine enemy locations such that the flank guard can be penetrated, and the main defensive positions attacked and over-run.
- 3. The squadron commander has been informed that he must identify all enemy in the sector and may authorize by-pass of platoon sized positions once reported and once their picketting has been coordinated with follow on battle groups.
- 4. The problem of haste and coverage is extremely pertinent here. Use of helicopters will help accelerate the operation but these will not be wholly effective until one hour after first light.
- 5. The squadron commander has outlined the sector, given his orders, stressed the critical points where enemy flank guard actions might be expected and insisted on total coverage.

6. Because of the contacts overnight he is concerned about any gaps being created between himself and the main body and, has liaised with lead battle groups to ensure flank surveillance by their recce elements. In addition, he will man the junction points along the brigade boundary. He has given the tasks of manning these points to his first and second troop.

- 7. Between report line RAIN DANCE and report line LONG WOLF his troops were engaged by RPG7 fire from three minor locations and a BMP was seen in the area of town at Reference Point 3. He decided to regroup support troop elements in third troop sector, at this point, to concentrate on the main route and on towns and woods overlooking the axis. The withdrawal of the PT76 North has caused him to be concerned that the crossing sites over the MUHR may be enemy flank guard covering positions and he, therefore, adds helicopter support to first troop and tasks him to reach area Reference Point 19 as quickly as possible and conduct an area recce of crossings.
- 8. This is the type of planning and foresight that the squadron commander must show. A sector reconnaissance at squadron level is a series of route and area reconnaissances at patrol level. The tasks given to the patrols are based upon the threat, ground and mission of the squadron.
- 9. Some other points to note are:
 - a. fire planning including fighter aircraft support must be coordinated early;
 - b. flank protection must be coordinated between the tail of squadron and the lead battle groups;
 - c. all difficult features must be reconnoitred; and
 - d. time needed to recce all built-up areas.
- 10. The types of drills used by his troops and patrols and the types of information the squadron commander must expect are well covered in BOL-305-004/FT-001 (CFP 305(4)).

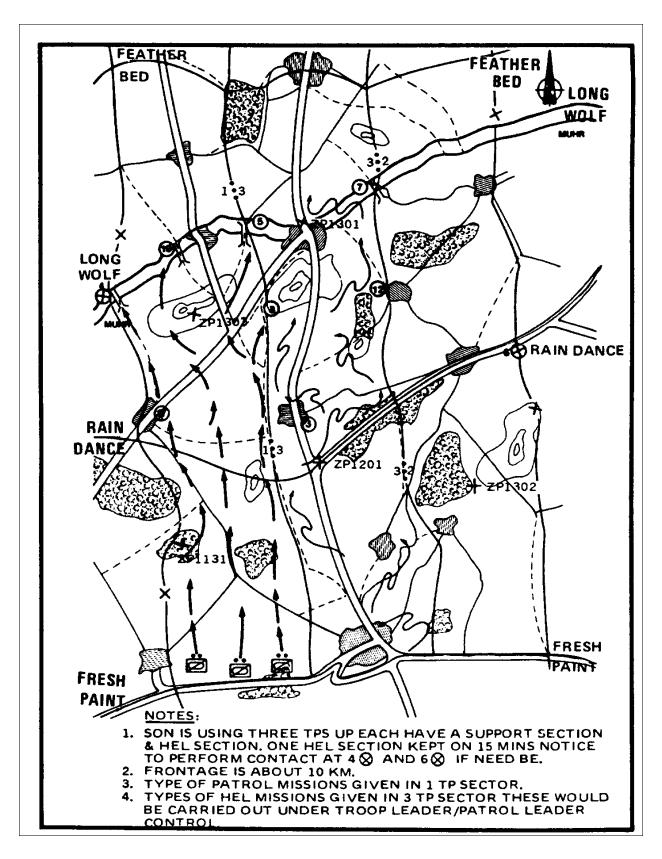


Figure 5-2 A Sector Reconnaissance

SECTION 4 - AREA RECONNAISSANCE

510. General

- 1. An area reconnaissance will not normally be carried out by a squadron as a whole. In most cases troops and patrols might be given specific tasks of area reconnaissance within the framework of a squadron level route or sector reconnaissance. However, occasions might arise when the brigade commander might deem it more important to get information on one or more specific areas and forego some of the early warning and detailed reconnaissance normally provided by the squadron. Some examples of this type of tasking might be:
 - a. the reconnaissance of certain crossing sites along an important obstacle; and
 - b. the reconnaissance of a particular town or objective on which the commander might have previous information and might wish to have examined in detail.
- 2. In any event, the reconnaissance of an area is conducted in the same manner as a sector reconnaissance with the exception of the routes to and from the area. Emphasis is placed on reaching the area as quickly as possible, with enemy contacts on route reported and by-passed.

511. Planning and Execution

- 1. The squadron commander having been given a mission of area reconnaissance should plan his operation in a minimum of two phases:
 - a. the move to the area; and
 - b. the conduct of the reconnaissance.
- 2. In the first phase, the squadron may be required to move as a group or in troop groups to the area to be reconnoitred. If this area reconnaissance is to be conducted ahead of friendly lines, action on contact and conduct of observation must be clarified.
- 3. The brigade reconnaissance squadron does not normally operate in isolation and liaison with any covering force or screening troops will be essential in this role. This must be planned prior to launching the operation and effected on the ground.
- 4. Helicopter resources permit a rapid method of area reconnaissance for areas behind friendly lines but must be used more conventionally in helicopter/troop teams when forward of friendly lines and where enemy contact is imminent.
- 5. Figure 5-3 illustrates the type of operation that might be considered. A breakthrough has been achieved and the brigade is ordered to pursue and destroy the enemy plus of the river MAUCH. The brigade commander has his formation deployed with one battle group as advanced guard proceeding along the main axis. He wishes to maintain his momentum and be capable of

pushing across the MAUCH in pursuit of the enemy before nightfall. He considers that the crossings of the MAUCH, some 25 kms to his front might be denied him and orders the squadron to proceed with haste to recconnoitre the possible crossing sites along the MAUCH. The squadron is tasked to conduct an area reconnaissance of possible crossings of the MAUCH within the brigade boundaries, then to provide observation over those crossings pending arrival of the advance guard, and to report the bypass of all enemy before entering area designated FEATHER. The brigade will be reaching GREAT BLOW in two hours and then proceed along HEART Route. The recce squadron is conducting recce of two routes, HEART, primary and DIAMOND, alternate, and is now at GREAT BLOW. It is 1000 Hrs on a clear fall day, orders were received by secure means on the Brigade Command Net.

- 6. The squadron commander's concern is speed and thoroughness. He will issue a warning order and personally brief three of the troop leaders once he has devised his plan. Encoding of the plan and orders is time consuming so he intends to personally contact and issue orders to third troop separately, proceeding by helicopter. His plan is as described in Figure 5-3.
- 7. Important points to remember are:
 - a. detailed map study of area to be recced is the key. Tasks then become self-evident;
 - b. the need for speed predominates the requirement for thoroughness of recce along the route to the area;
 - c. the all-important mission is the area recce and the squadron commander cannot allow all forces to be pinned down and thus become incapable of pursuing the mission;
 - d. helicopters will speed up tremendously the progress of the squadron to the area;
 - e. once in the area, the reconnaissance of bridges, fording and swim sites must proceed with speed and thoroughness;
 - f. approaches to the selected crossings sites must be covered by OPs on both sides of the MAUCH:
 - g. contact with the advancing brigade must be maintained by radio throughout;
 - h. the recce squadron has very limited ability to fight off a determined enemy but can cause a fleeing enemy to be neutralized. Importance cannot be overstressed of having a DS battery and ensuring that progress of the squadron does not exceed the range of indirect fire support. Support from division artillery should be sought to increase this suppressive fire. In addition, recce of crossings along FEATHER can be supplemented by air recce prior to the arrival of recce troops. An "IN FLIGHT" report will assist the squadron commander in concentrating his effort where needed:

- j. to complete this area reconnaissance mission in time, the squadron must operate well in advance of the Brigade lead elements once in situ on FEATHER;
- k. it is worthy to note the following -
 - (1) the brigade will be proceeding along HEART and will recce the route itself with battle group recce elements,
 - (2) the squadron will proceed by two covered routes, to recce bridges, fords and swim sites in each sector within FEATHER,
 - (3) two engineer recce parties are under command to the squadron (in addition combat divers could be requested and attached),
 - (4) support troop (-) is given a sector of its own to accelerate recce of crossings,
 - (5) recce must include approaches on the far side of bank,
 - upon selection of crossing sites, the squadron should establish control elements on site and on near bank. The squadron commander's recommendations here are all-important since they orient and will commit the brigade to two or more sites in the sector of FEATHER,
 - (7) use of helicopters in strongly recommended and employment suggestions are as follows -
 - (a) <u>in Phase 1:</u> to speed up route recce and accelerate progress of both groups to FEATHER, under control of the leading troops,
 - (b) <u>in Phase 2:</u> to observe most major crossings and determine general state along FEATHER and orient ground troops to likely sites,
 - (c) <u>in Phase 3:</u> provide
 - i. rapid screen on far bank along likely approaches,
 - ii. establish rapid control points or contact points with advancing troops,
 - iii. radio relay of results if needed, and
 - iv. liaison with brigade on crossing plan if needed;

- (8) the move of SHQ must be rapid. Three likely sites have been indicated. SHQ might be used to coordinate the brigade traffic control of the crossing or to control the screen and both must be foreseen; and
- (9) in the case of contact point TK, it is suggested the brigade HQ be requested to carry out that mission.
- 8. See Annex G for an aide-mémoire for orders for an Area Reconnaissance.

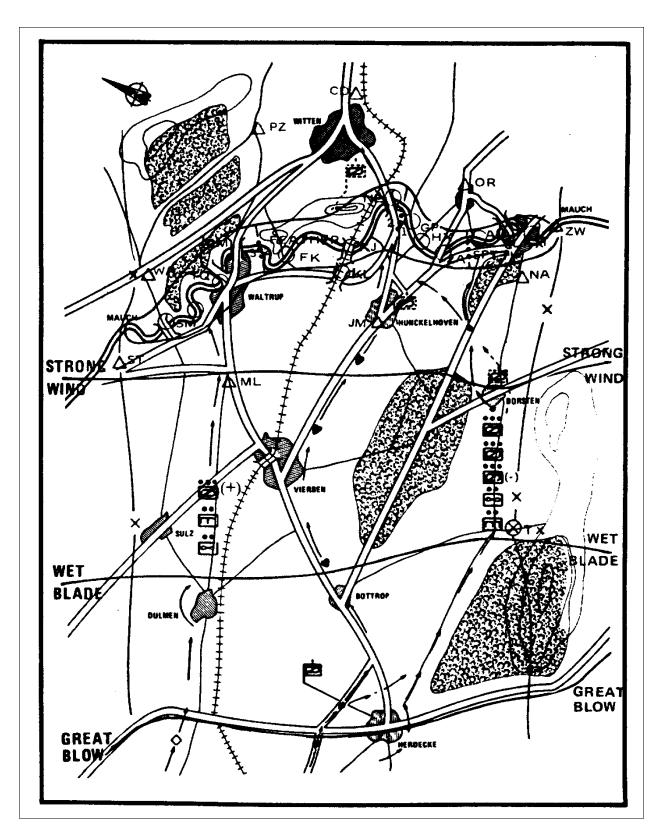


Figure 5-3 Area Reconnaissance at Squadron Level

SCREEN OPERATIONS

601. Introduction

- 1. A screen is defined as a force whose primary task is observing, identifying, and reporting on the enemy. It must be clearly understood that a screening force, by definition, cannot be tasked to impose delay on an advancing enemy. If delay is required, then the force deployed is a guard, and it must be provided with the firepower required to impose that degree of delay on the enemy that the commander appreciates will be required in his sector.
- 2. The reconnaissance squadron without attachments is capable of conducting screening tasks. Its ability to observe, identify and report will be enhanced by the attachment of helicopters. Its ability to survive will rest upon its mobility, its use of ground, cover and concealment and will be increased by the artillery which is in range to support it. Its ability to force the deployment of the enemy and to survive enemy action will depend on the additional resources of firepower grouped with the squadron.

SECTION 1 - THE BRIGADE SCREEN IN THE DEFENCE

602. General

- 1. The aim of the screen in the defence is to provide the brigade commander with continuous information on the enemy and the approaches he uses into the area, either frontal, from the flank or from the rear. The brigade screen in the defence, however, will normally be deployed to the front with battle group recce troops providing screening on the flank. The principles and techniques described hereafter generally apply to any of these postures.
- 2. The basic fundamentals of a defensive screen are:
 - a. effective observation coverage of the area and, in particular, of the major enemy approaches;
 - b. the accurate and timely reporting of all information;
 - c. maintenance of contact with the enemy;
 - d. avoidance of direct engagement; and
 - e. engagement of the enemy at long distance by indirect fire.

603. Elements of a Screen

- 1. <u>Concept.</u> Every element of information on the enemy must be accurately and rapidly transmitted to brigade HQ. To do this the squadron is normally deployed in a tactical organization designed to provide for:
 - a. an observation post line (OP line);
 - b. patrolling of the area;
 - c. deployment of surveillance, target acquisition and night observation devices; and
 - d. squadron headquarters.

Observation coverage of the area must be total but principally oriented on the major enemy approaches. The screen has observation as its primary mission. Direct fire engagement must therefore be avoided other than for self-defence. As the enemy closes, the screen is withdrawn either totally or partially through the battle group screens and guards to another mission.

2. <u>Deployment.</u> Having done his appreciation and based in part on the time by which the screen must be in position, the squadron commander ideally deploys the squadron 6 to 15 kilometers ahead of the FEBA (and the obstacle) and over 10 to 15 kilometers in frontage or as

far as ground and fire support permit. The squadron is thus usually found with most of its resources deployed forward, with three recce troops up. The squadron can thus man nine OPs within recce troops for prolonged periods but may double this number for periods of up to twelve hours. Troops should then be rested prior to further tasking. The support troop may be used to provide either 4 surveillance posts with their radar and night observation devices (NODs), to patrol likely areas of enemy infiltration or to perform a combination of both. They normally provide depth to the OP line. Helicopters can patrol the area between the OP line and the FEBA and maintain contact with enemy recce elements infiltrating the screen by day or operate, in an emergency, as static OPs by night. They can also provide assistance on withdrawal of the screen by rapid liaison for passage of lines and by route recce of the withdrawal routes.

604. Threat Affecting Screen Tactics

- 1. In determining the basic concept of operations for the brigade screen the following aspects of a Warsaw Pact threat must be considered.
- 2. The squadron alone has very limited firepower. However, the armoured piercing .50 calibre round can defeat most enemy light recce vehicles and APCs at ranges up to 500 metres.
- 3. The only squadron weapons capable of defeating enemy main battle tanks (MBT) are the MAW and LAW with maximum ranges against moving targets of approximately 300 and 200 metres respectively.
- 4. The mobility and armoured protection offered by the Lynx is roughly equivalent to or greater than all enemy vehicles in the reconnaissance screen and, with the exception of the tank and BMP, all vehicles in the enemy advanced guard.
- 5. The tanks, APCs and ATGMs, in the enemy advanced guard can easily destroy any vehicle of the squadron which is detected.
- 6. The presence of enemy jamming equipment may often result in the squadron's communications being neutralized early in the operation.
- 7. The ability of any reconnaissance helicopters attached to the squadron to assist in the screening mission will be significantly reduced because of the enemy's regimental anti-air weapons held in the main guard.
- 8. There is a high probability that the enemy will have air superiority in the area of the screening operation.
- 9. The normal approximate gap between the enemy reconnaissance screen and the point of the advance guard is eight to 10 kilometres. The normal distance from the point of the advance guard to the leading elements of the first echelon forces is 11 to 23 kilometres.

605. Deductions

- 1. Troops of the reconnaissance squadron are capable of neutralizing the basic patrol of the divisional reconnaissance battalion; this however compromises any screening operation.
- 2. In order to determine the main axis of advance, reconnaissance squadron patrols must not begin to withdraw until the advance guard is observed ensuring, if possible, that contact is maintained with enemy elements and passed to the following battle groups.
- 3. Unless heavily reinforced, the squadron must withdraw under pressure from the advance guard. If information on the enemy first echelon forces by ground observation is required, staybehind patrols must be deployed.
- 4. Depending on the terrain (built up areas, forests and other natural or man-man obstacles) there may well be only one major axis in the brigade frontage which can accommodate a first echelon regiment.
- 5. The screen deployment line should be approximately 2000 meters short of the artillery support available, so that targets can be engaged.
- 6. Helicopters will not normally operate closer than 2000 to 3000 meters from advance guard forces because of the presence of the enemy anti-aircraft weapons.
- 7. The squadron must be provided with HF communications, preferably down to patrol level, to reduce the effectiveness of the enemy's EW efforts. Some considerations should be given to deploying a telephone line junction on the enemy side of the FEBA, which can be used to pass information back should radio communications fail. In addition, alternate means of indicating major enemy axes such as flares, white light at night etc, will have to be included in commander's orders.
- 8. Stealth, effective communications, good use of ground, speed, cunning and responsive artillery support will be keys to accomplishing the squadron mission.

606. Planning and Execution (Figure 6-1)

- 1. As a guide, Figure 6-1 and the following denote the factors and an approach to the establishment of screen based on a given scenario. Again this method is used as an example, is far from complete but should serve to provide a feel for the planning requirements and effective execution of a screen. Remember always that only one thing is sure about the enemy: "He won't do what you expected him to".
- 2. The picture painted here is the establishment of a screen by first light ahead of an obstacle on which the brigade commander wishes to establish his defence. The two main frontal approaches into the area are either side of the SCHWARZ ALB, and the commander wants thorough coverage of these approaches. Enemy recce elements are to be let through, but contact

is to be maintained with them. Battle groups have been given permission to establish OPs on and plus of the obstacle but not to exceed 2 km from BROAD SHOVEL and to provide OPs on and plus of the obstacle but not to exceed 2 km from BROAD SHOVEL and to provide OPs on all crossings. Demolitions have been prepared for crossings at FQ, ZD, OP, NL and VW and these should be destroyed prior to the enemy recce elements crossing PROUD PIPE. Reserve demolitions have been established on, QT and MR and swim/fording sites at PM, DC and KS will be left open and under observation and preliminary mine-laying will be carried out on farbank. Time in OP line is estimated at up to 24 hours.

- 3. In general, the squadron commander's task consists of:
 - a. establishing an OP line to cover the two major approaches and any secondary approaches from the flank by first light;
 - b. patrolling of the areas not covered by observation between PROUD PIPE and BROAD SHOVEL;
 - c. establishing surveillance on and ahead of PROUD PIPE by day and night;
 - d. coordinating and informing his troops of the withdrawal of the covering force elements due to pass through WO and JZ and obtaining any information from them. These contact points will be manned by brigade LOs; and
 - e. defining the fire plan, and the plan for withdrawal of the screen and general guidelines for subsequent taskings if only a coordinated assembly area.
- 4. The enemy is as described in art 604 and air parity exists; nuclear release has not been given.
- 5. In Figure 6-1, the squadron commander has initially established OP targets at main intersections as seen. It should be noted that the targets are deployed in depth and, because of ground, out to some 10 kms ahead. Other major points to consider are:
 - a. patrolling with helicopters in first and second troop sectors with concern on the flanks by day and manning of two OPs, EO and FH by night. In addition, the helicopters are to maintain contact by day with enemy recce elements as they are observed moving through the screen;
 - b. each troop must recce both the crossing site and bridge and liaise with personnel in situ in regard to withdrawal routes, coordination is then finalized at squadron/battle group/brigade level;

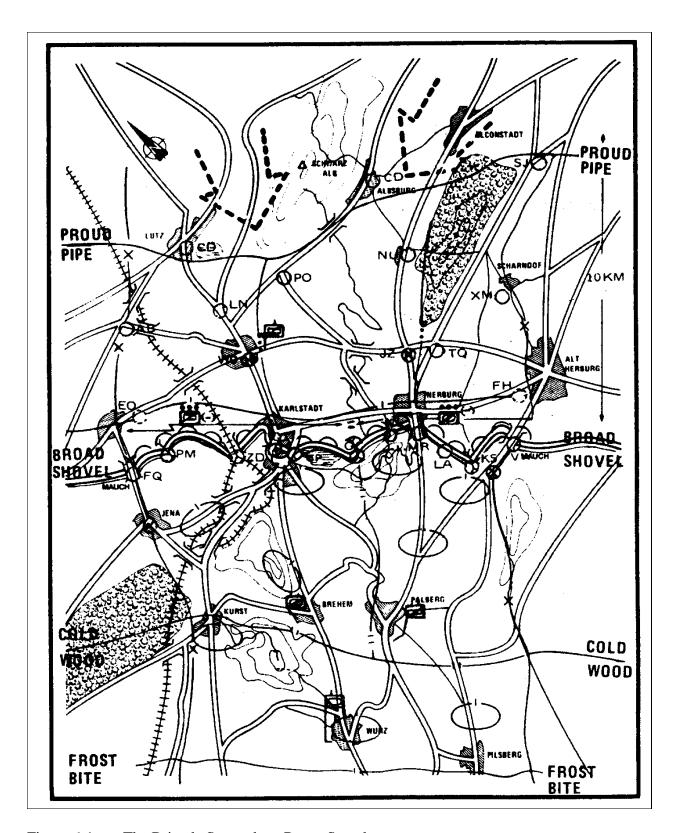


Figure 6-1 The Brigade Screen by a Recce Squadron

- c. back-up HIF net and flare signals are established in case of enemy EW and artillery activity;
- d. LH and TQ are to be prepared to remain as stay-behind patrols if required; and
- e. support troop radars are not to be activated until enemy recce elements have crossed approximately to 6 km North of PROUD PIPE. Support troop will cover the main frontal approaches from sites selected in area of OPs PO and NU, and be prepared to carry out several two-man recce patrols at night.
- 6. At Annex H is an aide-mémoire orders format for this type of operation. Remembering that the enemy has rarely done what has been expected of him, and also that most of the work is done by individual patrols in the squadron, a thorough briefing with general guidelines for the conduct of the operation is essential if the execution of the mission is to be properly carried out. To do this the requirement for the patrol commander to ask himself: "What next?", and come up with an answer can only be achieved it he is thoroughly aware of the brigade's needs.

SECTION 2 - FLANK SECURITY

607. General

- 1. The reconnaissance squadron may be tasked in various phases of war with flank surveillance for the brigade. The aim then is to provide early warning to the commander of the enemy threat to his flank. In a defensive posture this might be achieved by establishing a screen, following procedures similar to those described in Section 1. However, in the advance or withdrawal the squadron might likely be required to provide flank surveillance which will require a somewhat different approach due to the need for this screen to be mobile. This section will deal with the principles, planning and execution of such a mission.
- 2. The provision of a flank guard is only possible if associated supporting arms, mainly tanks, infantry and artillery are made available to the squadron. One of the key areas of concern is the action to be taken on contact of enemy recce elements by such a flank surveillance group. This will be dealt with in art 609.

608. Fundamentals and Elements of Flank Surveillance

- 1. The basic fundamentals of flank surveillance are similar to those of the screen outlined in art 602 but it should be added that, because of the vulnerability of command and echelon elements of the brigade located to the rear, a more aggressive attitude must be adopted towards enemy reconnaissance elements infiltrating from the flank. Whether this is done by adding directly to the firepower of the reconnaissance squadron or through a combination of the use of indirect fire by the recce squadron and close liaison with the flanking battle group responsible for flank security, the enemy reconnaissance elements must not be allowed to penetrate the formation and hence be detected, pursued and destroyed.
- 2. The main activities of the squadron undertaking flank surveillance are:
 - a. providing a mobile screen to cover main enemy approaches from the flank into the brigade area;
 - b. conducting reconnaissance of future positions concurrent with the brigade advance and likely enemy approaches;
 - c. effecting surveillance of the area between the screen and the main body;and
 - d. only in the case of a flank guard, providing forces required to destroy enemy penetration of the screen.
- 3. Normally the squadron, with attached helicopters, will be limited to providing the elements listed in subparas 2 a. to c.

- 1. The Threat. The enemy threat to the flank might be similar to that described in art 604 if a deliberate attack is directed towards the flank of our advancing formations. The enemy would attempt to attack along interformation boundaries and, if halted in one direction, to counter our advance by attempting to outflank our advancing force. It is thus probable that elements, other than the normal reconnaissance and advance guards, such as entire armoured battalions might be encountered. On the other hand, enemy static defensive locations might be encountered such as those depicted in Figure 4-3. In addition, enemy air activity and low level approaches might be delivered from the flank of the formation to lessen its chances of detection and to optimize its stand-off capabilities.
- 2. <u>Friendly Forces.</u> The conduct of flank surveillance will not normally be done in isolation. Within the framework of a division or corps, a flank guard might be provided from higher formation and liaison and coordination with this force would be required. This is normally done at junction points (see art 422 of CFP 305(4)). However, in the worst case, that of providing the only flank surveillance, the role of the brigade reconnaissance squadron becomes more complex and, in this case, its resources are limited to one flank.
- 3. For this type of task, recce troops can be moved in any of three ways.
 - a. the leapfrog of recce troops within the surveillance screen (Figure 6-2);

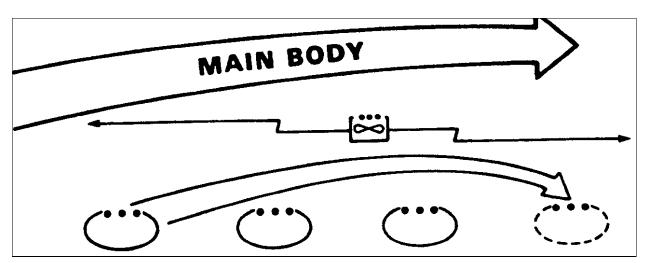


Figure 6-2 Flank Surveillance - LEAPFROG

b. the caterpillar of recce troops from surveillance of one approach to the next along the whole flank (Figure 6-3); and

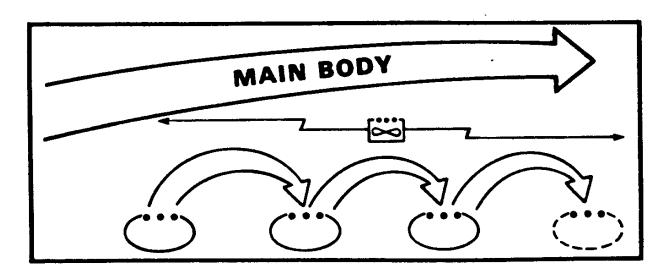


Figure 6-3 Flank Surveillance - CATERPILLAR

c. the more mobile surveillance of the flank being limited initially to a patrol with helicopters with the squadron conducting a modified sector reconnaissance of the ground between the screen proper and the main body.

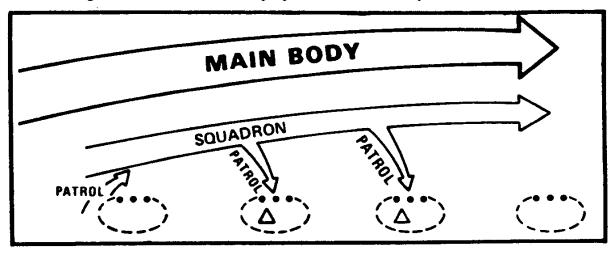


Figure 6-4 Flank Surveillance - MOBILE

- 4. The two types of manoeuvre described in Figures 6-2 and 6-3 involve picketting by troops, the mobile flank surveillance involves one troop picketting the move of the squadron which itself regulates its move in accordance with the move of the rear of the vanguard.
- 5. Both the caterpillar and leapfrog systems of surveillance provide more security and should be employed as the threat of enemy contact is imminent.

- 6. The mobile method is used when the threat of concerted enemy action against the flank is less likely or the advance rate of the main body is too rapid to allow the use of caterpillar or leapfrog.
- 7. Modifications and combinations of these methods are possible and will depend primarily on the enemy, ground and time, but remember that a squadron motoring down a road provides neither protection nor early warning to the brigade. A patrol must be static in order to hear, observe and report properly.
- S. Figure 6-5 and Annex J provide a guide to flank surveillance operations. In this operation the brigade is advancing on the left-most axis designated HEART as part of a two brigade advance. The brigade commander is concerned about his left flank because corps reconnaissance elements have been allocated to cover the advance. He considers that the recce platoon of the Battle Group performing the vanguard task can adequately do the job. He cannot afford to commit any further support to flank coverage except for the normal reconnaissance flight of the helicopter squadron. The vanguard crossed SHORT CUT at first light and is progressing well, having advanced passed NEW DEAL some 15 km by 1300 hrs. The pace is reasonably rapid but, because of section and platoon size pockets of resistance, still not as fast as he might like. The enemy air threat is still serious, so deployment and movement are tactical and relatively cautious.
- 9. The squadron commander has been given the task of flank surveillance and has been told to provide at least 30 mins warning of a major enemy penetration from the NW and N. The squadron is authorized to bypass after reporting elements of section strength. Platoon elements and above must be picketted at least until the main body has passed. Coy and battalion level threats will have to be dealt with by the main body if they cannot be by-passed by the brigade and thus contact must be maintained for the duration.
- 10. Because of the warning required, the squadron commander has selected a series of troop sized areas some eight to ten kms from the main body to cover the main approaches threatening the left flank.
- 11. He can occupy two such areas at any given time. The third troop is normally moving leapfrog from last location to the new and is assisted by a section of helicopters. The troop normally rejoins the axis to make best speed, then, on leaving DIAMOND proceeds or a route recce to his new location where he establishes observation along designated approach.
- 12. Squadron HQ leapfrogs along DIAMOND and the support troop and helicopters provide patrolling of the area between the main body and the troop locations.
- 13. Several points that the squadron commander might consider when planning and executing this type of task are:
 - a. the speed of the advance and the degree of warning required by the brigade commander will severely influence the form and conduct of the operation;

- b. helicopters or support troop can be used for maintaining observation over an approach which has been left by a recce troop because of a requirement to move on the next location;
- c. the fire plan that he decides upon must cover targets observeable from the OP line and in the area between main body and OP line.
- d. the support troop can be broken down to each troop, left on main axis to recce this axis or employed as a recce troop to add a fourth element. If used as a recce troop, surveillance in depth would suffer but occupation of areas of observation would be more rapid;
- e. the squadron commander must remember the possible effects of enemy recce elements on the rear of the main body and that his weapons can destroy some of the vehicles of Warsaw Pact reconnaissance elements. He thus must clarify opening fire policy with commander. As a guide however, OP lines report contact, engage with indirect fire, contact is maintained by helicopters, and the enemy is engaged, if need be, along the squadron axis by the troop on the axis by indirect fire, then, within the main body by elements of the battle group by direct fire;
- f. liaison and coordination with follow on forces.

610. Flank Guards

- 1. The difference between flank surveillance and flank guard operations is the ability of a flank guard to impose significant delay by physically stopping an enemy threat to a flank or, as a minimum, causing him to deploy.
- 2. The squadron cannot alone impose significant delay against a concerted WP threat. Reinforcement by infantry, tanks, anti-tank guided weapons and artillery, or a combination of these, will allow the squadron to provide a reasonable delay.
- 3. The organization of the recce squadron reinforced by 3 ATGM detachments, a pi of infantry and a half-squadron of tanks is shown in Figure 6-6.
- 4. The squadron commander's task is relatively similar in these circumstances. He can, as shown, group his elements in several troop teams, and maintain several depth positions behind this reinforced screen to block enemy penetrations. Another option would be to provide a lighter screen and to establish one or more stronger blocking positions in depth. At any rate, the troops are leapfrogged from position to position and the use of helicopters is similar to that in flank surveillance. As a guide, distance between the guard and main body might be from 5 to 8 km from the flank. Support troop could be employed to provide surveillance of the area between the screen and the main body in conjunction with helicopters.

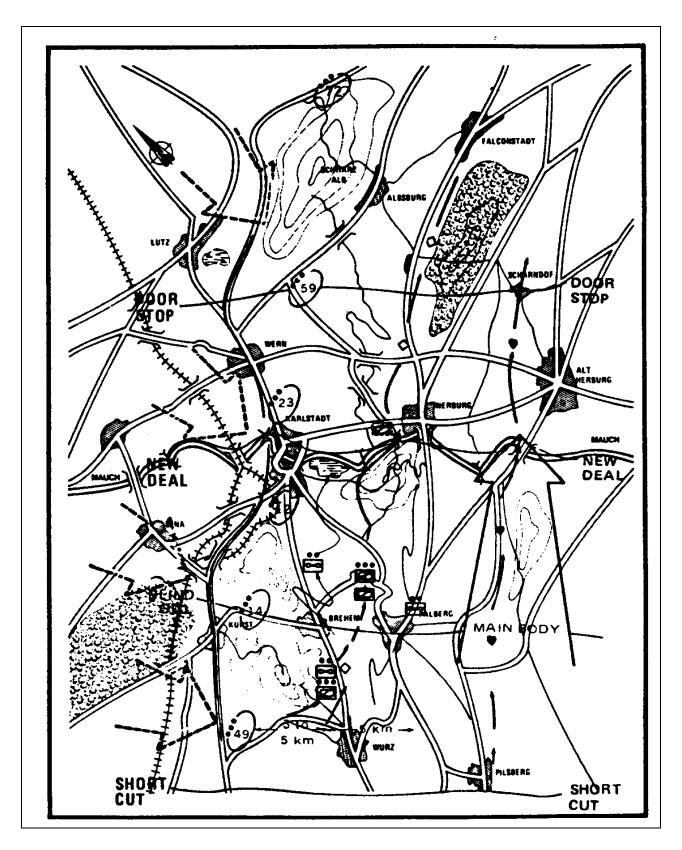


Figure 6-5 The Recce Squadron in Flank Surveillance

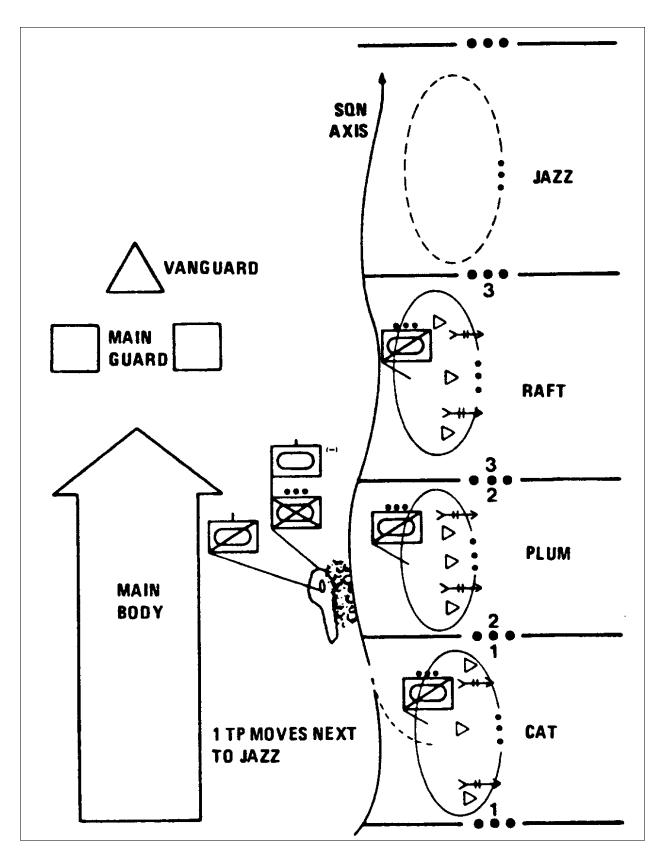


Figure 6-6 A Flank Guard by a Reinforced Reconnaissance Squadron

REAR AREA SECURITY OPERATIONS

701. Introduction

- 1. The purpose of rear area security operations, within the brigade area conducted by the reconnaissance squadron and supporting elements, if any, includes protecting one, some or all of the following from ground attack:
 - a. units behind main F echelon elements of brigade, (a reminder however that each service support element must be prepared to defend itself);
 - b. installations; and
 - c. lines of communication either continuously or for given periods.
- 2. This type of operation is applicable not only to conventional war but also, with appropriate modification, in relation to the threat and environmental constraints, to certain internal security and peacekeeping operations.
- 3. For the purpose of this chapter, however, the conduct of rear area security operations will be described in the context of a brigade in general war, against a Warsaw Pact (WP) threat, in a European threatre.

702. The Threat

- 1. The threat in this context may involve airborne, heliborne, airlanded, guerilla, infiltrator or breakthrough forces and may even include refugees in some cases.
- 2. WP doctrine for parachute operations involves:
 - a. the seizure of important areas, routes and crossings in depth in anticipation of rapid link up and exploitation by ground troops;
 - b. the exploitation of nuclear strikes (drops within 20 or 30 min after strike);
 - c. the destruction of airfields;
 - d. sabotage against nuclear delivery means, their support units or guidance equipment;
 - e. the disruption of troop control by operations against headquarters, and vital installations; and

- f. assistance to partisans.
- 3. Within the brigade area airborne or airmobile operations of up to company size against key areas and crossing sites for link-up with main forces can be expected. Normally, airborne operations are preceded by reconnaissance, primarily by air, but possibly by clandestine agents and long range patrols. These activities might include dropping of parachute teams outside of the area of interest as a deceptive measure.
- 4. Both airborne and heliborne troops are normally lightly equipped and fire support is likely to be restricted to mortars, ATGM and direct fire weapons of up to 35 mm. They may, if the size and importance of the operation so warrants, also be supported by air strikes, light tracked APCs and what missiles and artillery that are within range. Most WP transport helicopters are equipped with MGs and rockets missiles for defensive suppressive fire.
- 5. Partisan and infiltrators operate in small bands and manoeuvre in rear areas, woods, towns and swamps. They avoid direct confrontation with organized combat forces in open areas, and concentrate on disrupting lines of communication (ie, railroads) and destroying key installations and areas. They also provide much intelligence to the main enemy force. Their operations are normally carried out at night.
- 6. The squadron commander's appreciation of rear area tasks should thus include:
 - a. protection of key installations and units;
 - b. protection of lines of communications;
 - c. denial of drop zones and landing sites;
 - d. finding, fixing and destroying stay-behind, infiltrated and guerilla forces;
 - e. actions against breakthrough forces;
 - f. area damage assessment;
 - g. traffic control and convoy escort.
- 7. It is important that operations of airportable and air droppable units of platoon or company size be countered when most vulnerable, ie, when landing. At this point, the offensive power of a recce squadron is more than sufficient to neutralize such an operation.
- 8. It is therefore important as well that reconnaissance troops committed to rear area security display the required alertness at all times and not develop a garrison mentality. Rear area security is an around-the-clock operation.

- 1. The squadron commander when assigned such a mission first conducts his reconnaissance to determine:
 - a. key terrain within his area;
 - b. location of headquarters and installations;
 - c. likely enemy drop and landing zones; and
 - d. likely base areas for guerillas or infiltrators.
- 2. He must then plan for:
 - a. surveillance of the area;
 - b. control of civilian population in conjunction with other agencies;
 - c. protection of critical installations and lines of communications;
 - d. alert and warning systems, periodic checks of communications and these systems; and
 - e. reaction force to concentrate quickly against any sizeable enemy threat.
- 3. As a guide, Figure 7-1 and the Aide-mémoire at Annex K provide guidance as to the tasks and the execution of a rear area security mission. The squadron can operate roughly in an area not in excess of 100 km² if it has overall responsibility and the threat is considered limited to what has been described above. It is evident that constant total surveillance of such an area is impossible and therefore selection of priorities and close liaison with friendly forces in the area is of utmost importance.
- 4. The brigade is occupying positions in depth within the framework of a divisional defense. The brigade commander is concerned with the security of his rear area for two reasons:
 - a. Route CLUB is his MSR and a main supply route for the forward brigades; and

- b. Enemy activity to the South has forced the flanking divisions to weaken their adjoining flank and the enemy use of long range patrols and saboteurs has hampered logistic activities and movement throughout the theatre. Heavy enemy air reconnaissance and our proximity to the DUHR canal to our rear make it probable that airborne or airlanded operations might be conducted to seize bridges over the DUHR canal and the SCHLUSS river. The squadron has been tasked, with rear area security of the brigade adm area between COAT HANGER and LOUD HORN. The brigade commander has placed the MP platoon under command of the reconnaissance squadron and has tasked the squadron to coordinate security of the rear area with emphasis on the security of the MSk and surveillance of the area, designated A, against airborne and airmobile attacks.
- 5. The squadron commander assesses his area during his reconnaissance and realizes that with the troops within and those under command he must cover an area approximately 150 km². The MSR within this area is approximately 20 km long to unit echelons. The squadron has also been told to be prepared to escort certain convoys on order. The squadron commander has appreciated four major likely enemy air drop or landing zones which he has designated:
 - a. Zone A Major threat to DUHR and SCHLUSS;
 - b. Zone B Possible threat to DUHR and SCHLUSS and threat to railway; and
 - c. Zones C and D Threat to MSR and railway.
- 6. He has effected liaison with major and minor units in the area, designated his squadron frequency as the security net, coordinated local protection and sub-unit OPs with the overall security of the area. From the maintenance company and transport company of the Svc Bn he has obtained manning of OPs at AS and ZB.
- 7. His plan is thus to provide surveillance at irregular intervals of the whole area coordinated by the means of mobile reconnaissance patrols under SHQ through a series of Reference Points. Two OPs with radars are manned by support troop at CN and XN to cover parts of area A and B. He establishes a rapid reaction troop in the woods to NE of Reference Point 19 to be rapidly dispatched to counter any reported landings or other incidents. He obtains the approval of levels of alert and the provision of reinforcements from troops in situ to counter any larger threat. The MP platoon patrols the MSR and mans traffic posts at Reference Points 14, 19, and 92. At night, one troop provides listening posts in areas C and D, surveillance troop in A. Another troop provides two patrols for patrolling and one listening post in area D. The last troop remains in area N of Reference Point 19 as rapid reaction force. It might also be tasked for convoy escort but would then have to be replaced in its primary mission.
- 8. Subsequent to this, the squadron commander rotates troops through various tasks and develops a fire plan for various contingencies. Other points to note are:
 - a. liaison with civil agencies;

- b. imposition of light policies and strict security of all unit locations;
- c. communication test and warning/reaction rehearsals;
- d. establishment of rest routine at troop level;
- e. maintenance of move discipline throughout the area; and
- f. protection of the air defence site in the area by echelon elements.
- 9. This is but one method of attacking the problem. Another would consist of dividing the sector into three, one for each recce troop, and employing the support troop as the rapid reaction force. Both have their merit and might prove equally valid. What is important, is that a well-known and efficient security plan exists which permits rapid and flexible reaction to the threat. This plan must be practical with security and discipline strictly imposed.

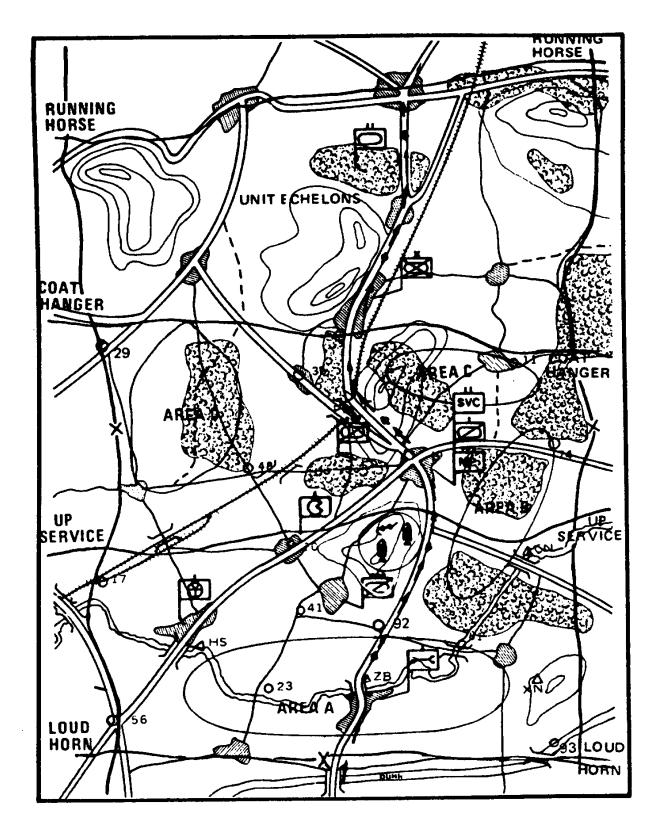


Figure 7-1 The Reconnaissance Squadron in a Rear Area Security Task

CHEMICAL AND RADIOLOGICAL MONITORING AND SURVEY

801. General

- 1. Within the context of modern war, chemical, biological and nuclear weapons are most likely to be employed. Unlike Warsaw Pact (WP) forces, our brigade level formations do not contain any specialized NBC forces. The biological threat, because of the time required for it to be effective is considered a strategic threat and, as such, aside from our awareness of its possible use and the requirement for discipline in the realm of hygiene and sanitation, will not be covered in this chapter.
- 2. It is anticipated that WP forces will use chemical weapons with or without nuclear release. The use of one or both of these types of weapons by the enemy or the West has serious repercussions on operations because of the mass casualties and/or damage that they cause.
- 3. As a principle, it is important for a commander to assess damages and return to normal operational activities as soon as possible after a nuclear strike and the use of chemical weapons.
- 4. At brigade level, this means the effective training of all ranks in personal NBC defensive measures, the training of all units in collective measures and drills, and that of specific units in the reaction to the use of such mass destruction weapons. At brigade level the semi-specialized units are:
 - a. the reconnaissance squadron for reconnaissance, monitoring and survey of nuclear or chemical contamination;
 - b. the field position squadron for damage control and restoration of mobility; and
 - c. the field ambulance for mass casualty treatment and evacuation.
- 5. It is evident, by looking at the meagre resources of each, that their function will be one of coordination as well as execution and that, depending on the extent of the attack, assistance and input will be required of all units within the brigade and from higher formations.
- 6. B-OL-305-004/FT-001 (CFP 305(4)), Chapter 4, Section 9, details the troop and section level drills and requirements within the squadron. At squadron level the squadron commander must coordinate the activity of the troops and outside agencies to produce and collate the information required by the commander in relation to his aim and/or the general principle of resuming normal operations.
- 7. It must be borne in mind that this type of task can be given to the squadron in reaction to an enemy strike or to assist in exploiting a friendly strike. Certain specific tasks in relation to nuclear and chemical contamination may be given to the squadron to include one or more of:

- a. detection;
- b. monitoring; and
- c. survey.
- 8. <u>Detection.</u> The presence of chemical agents and nuclear radiation may not be evident until after the body has been gravely affected, so special detection equipment is needed and a policy of "safety first" practiced. Awareness of the threat by all individuals, sound knowledge of radiation and chemical detection kits and intelligent periodic monitoring will limit casualties and facilitate detection. The main radiological and chemical detection equipment available to the squadron is listed in B-OS-316-003/FP-001 (CFP 316(3)) and includes mainly:
 - a. the DT 60 personal dosimeter and reader;
 - b. the tactical radiological dosimeter IMJ013/PD;
 - c. the chemical M18A2 chemical detection kit; and
 - d. the tactical radiacmeter IM108B/PD.
- 9. <u>Monitoring.</u> Monitoring is primarily a protective measure designed to ensure early warning. Monitoring is conducted to detect and measure contamination in a specific location, and/or of structures, personnel, equipment, and supplies. Once nuclear weapons have been used, radiological monitoring must be accomplished on a continuous basis until such time as contaminated and safe areas have been identified. Thereafter, in safe areas, it is done periodically, usually once each hour, at designated points. A moving unit continuously monitors. This same principle applies to chemical contamination. Radiological monitoring by helicopters determines presence and level of airborne radiological contamination. Data obtained can also be used to estimate ground contamination by applying correlation factors.
- 10. <u>Survey.</u> Survey differs from monitoring in that it is concerned with determining contamination distribution throughout a specific area. It is accomplished by a coordinated effort in response to a specific plan. Usually, the situation requires considerable emphasis on rapidly accumulating the required data. This can be done most quickly by using helicopters and confirming with ground recce troops. Another advantage of using helicopters is that survey personnel are usually exposed for shorter periods than ground survey personnel. A survey requires personnel dedicated to the task. A radiological or chemical survey is conducted by a team consisting of a recce vehicle or helicopter crew. It is important to ensure survey personnel do not acquire a cumulative radiation dose which exceeds the dosage rates established by the theater commander and, therefore, monitoring and rotation of teams is important as is the establishment of proper decontamination procedure.

- 1. The task of monitoring can be performed by patrols or individual vehicles and the coordination of these and their duties will be somewhat similar to and often incorporated in OP procedures. The squadron will report the results to brigade headquarters which acts as the NBC control centre. On the other hand, the monitoring task might only be given as an Essential Element of Information (EEI) and, as such, becomes a subsidiary requirement to a normal reconnaissance task.
- 2. The squadron becomes most seriously involved when it must survey the contaminated sector. The procedures, planning and execution are similar to a zone reconnaissance with the particular purpose of:
 - a. establishing the rough extent of contamination;
 - b. determining the accessibility of routes in the area; and
 - c. reporting on damage resulting from the attack.
- 3. <u>Radiological Survey.</u> For this task the squadron commander must be aware of the limitations of his squadron. The drills described in B-OL-305-004/FT-001, Chapter 4, Section 9, are time-consuming and provide very rough data when applied over a large area. The most efficient method, if helicopters are attached, is to task the helicopters with the general survey of the area for which their speed and air mobility render them more effective, then to task the recce troops to:
 - a. confirm dose rate pattern if required;
 - b. locate, define and sign "hot spots" on given routes; and
 - c. determine levels of radiation at locations which are of particular interest in the conduct of future operations.

The key is the establishment of the safe 2 rad/hr line which denotes the normally acceptable level. This dose rate might be increased by the commander depending on the operational situation.

- 4. <u>Chemical Survey.</u> Because of the characteristics of many chemical agents in use by WP forces, the survey of chemical contamination over a given area will more likely be carried out by ground troops as described in B-OL-305-004/FT-001 and proceed as a sector reconnaissance.
- 5. The squadron commander should bear in mind that the aim of the enemy is to exploit chemical and nuclear strikes and therefore, following such attacks, the enemy must be expected. When carrying out such surveys, patrols must maintain alertness and the squadron commander should cover any gaps in the area with observation.

- 6. The command and control procedures are similar to those of a sector recce and most of these techniques should apply. Figure 8-1 depicts enemy nuclear attack on the flank of the brigade that was advancing along route DIAMOND, with recce squadron performing a route recce on DIAMOND ahead of the brigade. Casualties within the brigade are light, limited to about 3 per cent from blast and flash.
- 7. The squadron was proceeding with two recce troops up along DIAMOND when the explosion took its toll of 2 patrols and one helicopter on the left. Personal protective measures taken, warning and NUCREP sent, the squadron receives orders via LO to survey the radiological contamination in the left forward sector, to monitor contamination along DIAMOND and find safe routes around. Figure 8-2 depicts the reaction of the squadron commander to these orders at this stage. It should be noted that such a blast might neutralize communications for a while and that physical liaison is required.
- 8. The squadron commander dispatches a section of helicopters to survey the area along the left flank and orders his third troop to move to the left flank to continue the route recce without helicopters.
- 9. All troops monitor continuously until further notice.
- 10. Support troop is warned to be prepared to conduct the survey of key areas between CUSTOM MADE and JOLLY ROGER North of DIAMOND once the rough survey is performed by helicopters.
- 11. All data is written down and other helicopters from the Tactical Hel Sqn assist in survey and relay of information to brigade HQ.

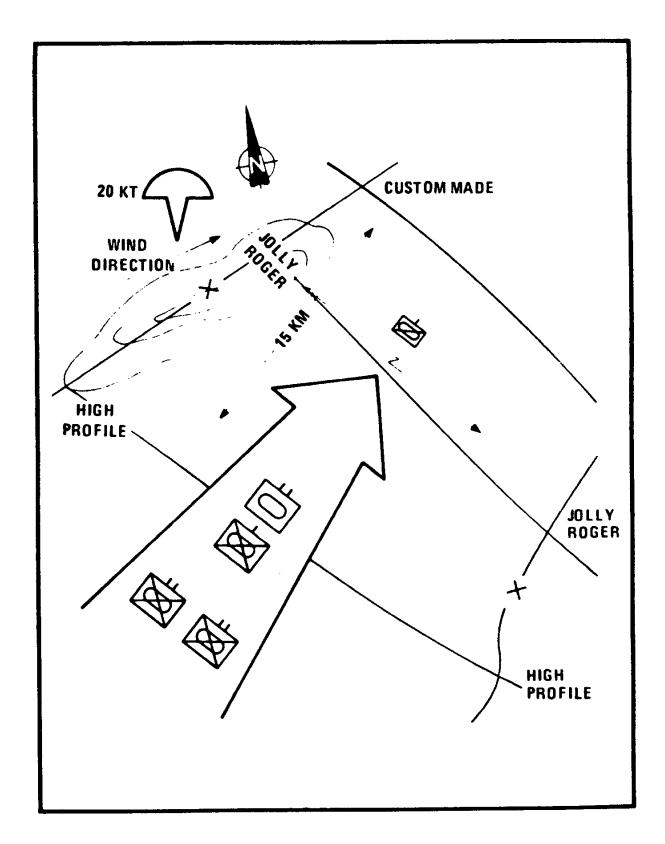


Figure 8-1 Nuclear Strike on Brigade Flank

- 12. Squadron commander maintains the use of two other helicopters to relay critical information from monitoring troop (-) on DIAMOND and from recce troops to SHQ and onward to brigade.
- 13. All troops mark hot spots along the route and SHQ plots the progress of troops and their reports of radiological contamination.
- 14. At this stage, depending on the degree of contamination that is encountered by helicopters, the squadron might be tasked by brigade to:
 - a. survey the limit of the 2 rad/hr line on the left, proceed with the reconnaissance mission while monitoring, and marking "hot spots"; or
 - b. drop the reconnaissance mission and establish a screen ahead of the brigade which takes up defensive posture while heavily contaminated cloud crosses ahead of the brigade; or
 - c. survey of the contaminated area by entire squadron in search of bypass for brigade.

803. Other Tasks

- 1. Although the primary tasks of the reconnaissance squadron will be reconnaissance and the monitoring and surveying contamination during conditions of nuclear or chemical attack, because of the mass destructive affects of such weapons, the squadron might become involved in, and must certainly be aware of, other possible tasks such as:
 - a. determining the damage and reporting on conditions of the unit or area attacked;
 - b. assuming control of survivors;
 - c. establishing communications between an attacked unit and its next higher headquarters;

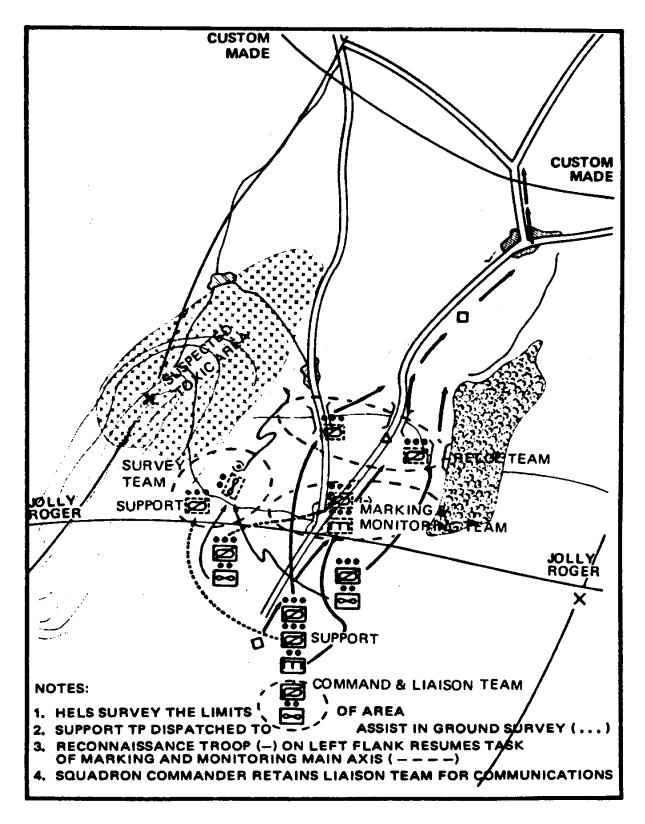


Figure 8-2 Reconnaissance Squadron in Partial Survey Mission

- d. assembling of survivors, forming them into fighting units and establishing communications with higher headquarters;
- e. assisting in casualty evacuations to the various casualty collecting points;
- f. assisting in the traffic control and evacuation of equipment and personnel to decontamination points; and
- g. performing limited decontamination.

TRAFFIC CONTROL AND CONVOY ESCORT

901. General

The reconnaissance squadron may be called upon to form a traffic control organization in all types of war. The squadron, because of its communications and equipment, is very well suited for this task. The task of convoy escort has also been included in this chapter. This task might be part of a rear area security mission in conventional war, or part of normal operations in peacekeeping or internal security operations. Because of its relationship to the regulation of traffic, the factors and considerations for convoy escort are similar to those of the establishment of a traffic control mission and in fact might form part of this mission, resources permitting. Principles and required data on the subject of road movement are available in B-OL-303-009/FP-001 (CFP 309(9)) and this chapter should be read in conjunction with that manual.

SECTION 1 - TRAFFIC CONTROL

902. Introduction

- 1. Traffic control is a mission whereby the reconnaissance squadron is required to organize, establish and execute the regulation of vehicle and personnel movement in accordance with a given plan to achieve a specific posture at the end of the displacement. The squadron will normally be required to reconnoitre specific areas and contribute to the movement plan which will be controlled by brigade headquarters.
- 2. In operations, traffic control organizations might be established for the deliberate crossing of a water obstacle, a minefield, the negotiation of a major defile, the passage of lines or withdrawal operations. The principles and organizations herein described are applicable to most of these circumstances.

903. Planning Factors

- 1. The principle factors which should be taken into account are enemy, ground, own troops, time and space, weather and logistics.
- 2. <u>The Enemy.</u> The likelihood of enemy interference especially air and sabotage when in depth, impose a requirement for constant vigilance, camouflage and dispersion. In addition the likelihood of major enemy intervention will impose a requirement for good communications and the ability to concentrate to counter this threat.
- 3. <u>The Ground.</u> The ground, in particular:
 - a. condition and capacity of routes;
 - b. location, cover and size of assembly areas and harbours;
 - c. defiles;
 - d. likely battle positions;
 - e. likely enemy approaches; and
 - f. likely bottlenecks and detours.
- 4. Own Troops. These are to be considered under two headings. Firstly, the troops available for the traffic control organization which could include the squadron resources themselves, the helicopters from the helicopter squadron and, perhaps, elements of the MP platoon, Service Battalion and some engineer support. Secondly, the troops to be moved must be considered in light of the number and size of serials to be regulated through the organization as well as of the types of vehicles. In addition, problems with refugees must be foreseen.

- 5. <u>Time and Space.</u> This factor includes key timings such as the start and end of movement, regulation of the traffic in accordance with the movement tables, first and last light and distances to be travelled.
- 6. <u>Weather.</u> This factor will affect time, space and ground conditions as well as creating possible control, visibility and endurance problems.
- 7. <u>Logistics.</u> The establishment of resupply, repair and recovery, med evac and other logistical support is necessary in any long move. These elements, if external to unit serials, should be controlled by the regulating HQ.

904. Traffic Control Elements

- 1. <u>Regulating HQ.</u> The reconnaissance squadron HQ might be the brigade traffic control regulating HQ and must be in constant communication with brigade HQ and all sector HQs.
- 2. <u>Sector HQ.</u> The main route might be divided into sectors for ease of control. Sector HQ might be formed by the troop HQ, the alternate CP or even the MP platoon HQ depending on the task and grouping.
- 3. <u>Traffic Posts.</u> These are formed by patrols or individual vehicles. They require radio, flashlights, signs, first aid kits and should be administratively self-contained. They should be aware of the movement plan and are required to maintain a log. Traffic sentries must identify and log each packet as it goes through.
- 4. <u>Liaison/Recce Element.</u> There is a requirement for mobile elements to effect liaison with friendly higher formation agencies, at key areas such as bridges, for the reconnaissance of routes and for liaison with packets and traffic posts in case of communication difficulties. In this regard, helicopters are the most useful during daylight but the LO and reconnaissance patrols must be employed after darkness. Bde HQ might attach several LOs from units to the regulating HQ who might employ them for such tasks as those above.

905. Main Tasks

- 1. The aim of the elements of the traffic control organization is to help maintain a regular flow of traffic and avoid congestion. The main tasks are to:
 - a. ensure columns follow the prescribed route and block timings;
 - b. prevent unauthorized military and refugee traffic from interfering with scheduled movement;
 - c. reconnaissance of detours and direction of traffic over them if the recognized route becomes blocked;

- d. keep in touch with the progress of current movement and report, as ordered, to the headquarters responsible for control;
- e. help to transmit and effect any alterations in orders to columns, packets or serials; and
- f. report on the state of roads.
- 2. It is therefore evident that the organization should contain both static traffic posts and a mobile element to effect some of these tasks. These mobile elements can either be centrally controlled at Regulating HQ or decentralized to each sector.

- 1. Figure 9-1 depicts a brigade level traffic control organization wherein the brigade is required to move approximately 60 kms to an assembly area, within a given time frame, in preparation for a blocking action against a possible enemy thrust. The movement is to be conducted at night along secondary roads. The planned route is designated HEART.
- 2. The squadron has been allocated the following resources under command:
 - a. six helicopters and the CP of recce night of the helicopter squadron;
 - b. the MP platoon resources;
 - c. elements for a staging camp from Service Bn; and
 - d. two engineer recce parties.
- 3. The move is to be conducted under conditions of radio silence in cooperation with traffic control elements of a higher headquarters.
- 4. The squadron commander has appreciated the problem and has organized the squadron as indicated:
 - a. a regulating HQ composed of the SHQ (-), two helicopters, one recovery element of Service Bn and one MP detachment;
 - b. two sector HQs, one formed from the Sqn alternate CP and one from the MP PI HQ each with;
 - (1) one recce troop;
 - (2) three MP detachments and one recce tp for traffic posts;

- (3) two helicopters for liaison;
- (4) one ammo carrier and one ambulance each; and
- (5) one engineer recce party;
- c. a start point manned by the SSM under command of sector HQ;
- d. replenishment station in sector 2 organized by the elements of the Service Battalion and controlled by the MP; and
- e. release point under command of sector 2 manned as a traffic point.
- 5. The squadron commander establishes phone communications with start point, sector HQ, release point and brigade HQ. He plans to employ helicopters for liaison and communications to sector HQ as a back-up to the phone lines. Sector HQs use helicopters to liaise with traffic posts and to monitor movement along the route. The reconnaissance troops reconnoitre alternate routes and assembly areas as part of contingency planning and maintain one patrol on alert to trouble shoot as required. Traffic posts monitor and log traffic now and advise column commanders of any changes. The SSM at the start point regulates entry of units along route in accordance with the movement plan. Brigade LOs are located at the start point, release point and at regulating HQ.
- 6. Figure 9-2 depicts the reconnaissance squadron performing this same type of task for a brigade deliberate river-crossing.
- 7. The control organization on the far bank will only be established if required and only after primary objectives have been taken by the assaulting elements.
- 8. It should be noted, however, that in this situation the squadron, because of its amphibious capability, would be used initially to find crossings and permit the brigade to cross without having to perform a deliberate crossing. If such a crossing is required, the control of the crossing might be done by units of higher formation and forward passage of lines on the obstacle would be performed. Figure 9-2 only outlines a third and more remote possibility.

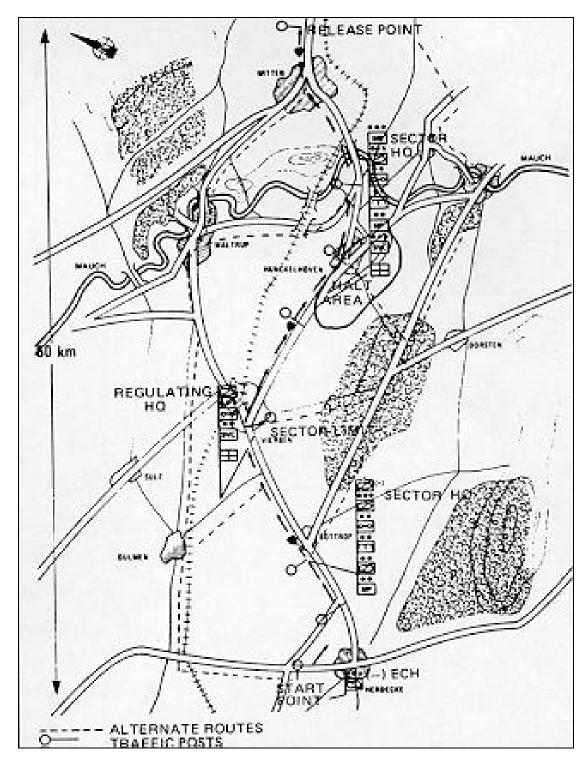


Figure 9-1 The Reconnaissance Squadron Performing Traffic Control Along Main Route

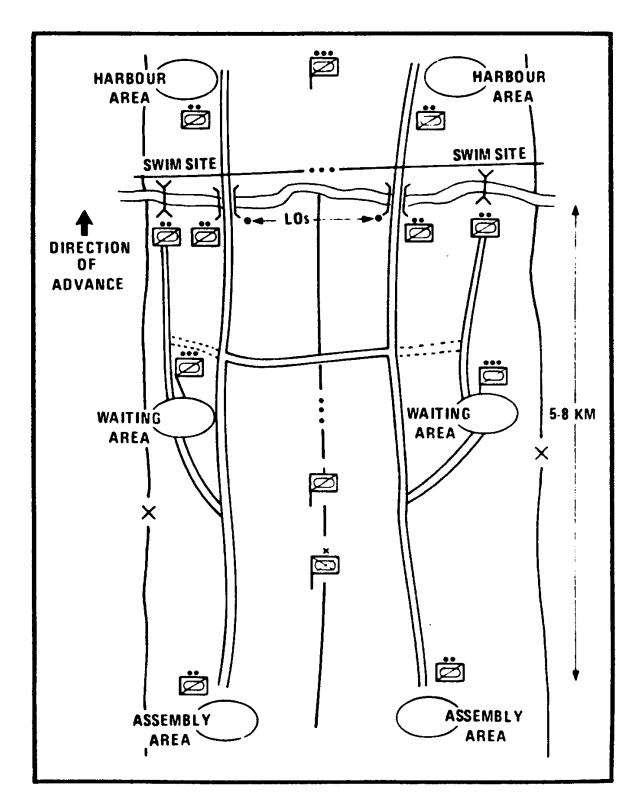


Figure 9-2 Organization of Traffic Control at Assault River Crossing

SECTION 2 - CONVOY ESCORT

907. Introduction

- 1. In all phases of conventional war and, in peacekeeping and internal security, the reconnaissance squadron is well suited to perform the tasks of convoy escort particularly when reinforced with helicopter support.
- 2. For this type of task, the troop is the lowest level capable of performing a security mission effectively. B-OL-305-004/FT-001 clearly defines the procedures and doctrine for troop level convoy escort.
- 3. At squadron level, the tasks might include the coordination of the escort of up to three separate convoys or the escort of a larger convoy.
- 4. The following definitions are important:
 - a. <u>Escort.</u> An escort is the force detailed to accompany and protect a column of vehicles from being scattered, destroyed or captured. Its commander is the escort commander.
 - b. <u>Vehicle Column.</u> This is the vehicle or groups of vehicles to be escorted. These vehicles could typically carry personnel, arms, ammunition, POL, supplies or a VIP.
 - c. <u>Convoy.</u> This comprises the escort and the vehicle column organized for the purpose of control and orderly movement. The escort commander is normally appointed as convoy commander.

908. Planning Factors

- 1. The factors to be considered when planning an escort are:
 - a. <u>Enemy.</u> The likelihood of an enemy attack and the tactics which he might employ (for example: mines, road blocks, air strikes);
 - b. <u>Ground.</u> The ground over which the convoy is to pass with particular reference to defiles, close country, built-up areas and detours;
 - c. <u>Escort.</u> The resources available including supporting arms, helicopters and air;
 - d. <u>Convoy.</u> The size and type of vehicles in the convoy and the vulnerability of the load;
 - e. <u>Time and Space.</u> The time of the convoy move, first and last light and the distance

to be travelled;

- f. <u>Weather.</u> It may be necessary to postpone the convoy to guarantee good flying conditions.
- g. <u>Logistics</u>.
- 2. When coordinating several convoys, the squadron commander must attempt to vary routes and timings as much as possible to avoid routine making him vulnerable to ambush or planned air strikes.

909. Planning and Execution

- 1. The escorting force will consist of three tactical groups:
 - a. <u>The Advance Group.</u> This is the leading element of the escort, it proves the safety of the route and attempts to warn of trouble before arrival of the vehicle column. It might be required to reconnoitre detours and to establish pickets. Helicopters attached to this group greatly increase its effectiveness particularly in detecting ambushes.
 - b. <u>The Close Protection Group.</u> Provides the immediate close protection to the vehicle column. The escort commander is located within this group as should be elements of the support troop.
 - c. <u>Reserve Group.</u> This element provides a rearguard, the reserves and recovery resources for the convoy.
- 2. Variations of this doctrine might be recommended from time to time, particularly in the case of VIPs to avoid becoming stereotyped and offering the enemy an opportunity to effect destruction of the close protection group and avoid their own destruction.
- 3. The advance group normally moves tactically whereas the main vehicle column moves at constant speed to avoid bunching and straggling. The reserve group should also move at constant speed. During any halt, local Perimeter security of the column must be effected.
- 4. The squadron commander/troop leader must always be alert when performing the task of escort commander, appreciate the ground ahead and continuously plan for contingencies. Proper drills for ambush, vehicle inspection and strict discipline in a column will facilitate the deployment of the column when needed. All personnel must be briefed on the proposed ambush drills generally and effectively directed in the event of such an occurrence. Therefore, the escort commander should always be planning one km ahead at least. His advance group will assist him in this. Figure 9-3 depicts a squadron level convoy escort.

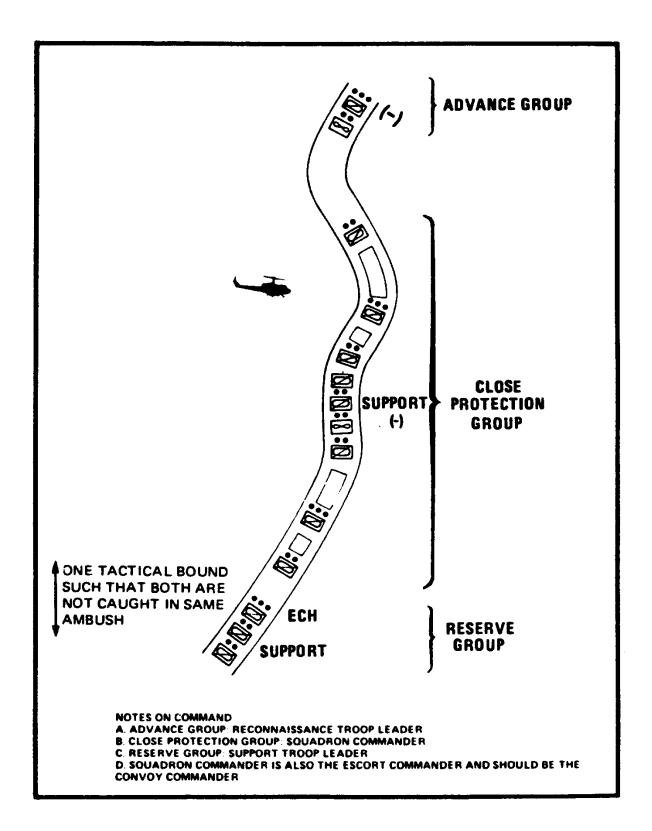


Figure 9-3 Recce Squadron Conducting Convoy Escort

CHAPTER 10

INTERNAL SECURITY OPERATIONS

SECTION 1 - INTRODUCTION

1001. General

- 1. Internal security operations are those which relate to aid of civil power or assistance to other federal departments when such assistance involves the use of armed military forces or the protection of defence establishments.
- 2. Tactical doctrine for mid or high intensity war situations will seldom be entirely applicable to internal security operations. There will be many variables because each operation is unique to the threat for which troops are being called out. These variables will impose restraint on the conduct of the operation, including the type of troops, vehicles, equipment and weapons which may be used.
- 3. The principle of minimum force will always be applied, with a controlled escalation of force authorized as the situation dictates. It is important to note that the use of tracked vehicles is perceived to be an escalation in itself. Therefore, when tasked for internal security operations, the reconnaissance squadron may not be authorized to operate in its normal mode.

1002. General Tasks

- 1. Virtually all soldiers must be trained in the techniques required for internal security operations. Operational plans dictate the skill level which must be achieved by designated units who conduct the requisite training to meet the standard. Notwithstanding its special operational characteristics, the reconnaissance squadron must be prepared to provide forces to conduct the following general tasks:
 - a. Confrontation/Dispersal Actions.
 - b. <u>Protection of Personnel.</u>
 - c. Security of Vital Points.
 - d. <u>Control of Movement.</u>
 - e. Cordon and Search; and
 - f. Special Operations.
- 2. The detailed techniques for these tasks are covered in the following publications and will not be discussed further in this manual:

- a. CFP 302(8), Aid of the Civil Power, Part Two, Tactical Operations;
- b. CFP 302(8), Part Three, Weapons and Equipment;
- c. UP 302(8), Part Four, Aide Mémoire for Members of the Armed Forces Engaged in Aid of Civil Power Operations; and
- d. CFP 302(8), Part Five, Aide Mémoire for Officers.

When deployed to conduct the general tasks outlined above, it is important to remember that the reconnaissance squadron is different from other units because of its rank heavy structure, large numbers of automatic weapons and training in mounted operations.

1003. Specialized Tasks for the Squadron

- 1. <u>The squadron can best perform in mounted operations.</u> When the squadron is deployed with its vehicles or when the tasking headquarters has provided sufficient wheeled vehicles with comparable communications, the squadron would best be tasked to conduct operations which exploit its flexibility, mobility and specialized reconnaissance expertise.
- 2. The following tasks, all potentially required for Internal Security (IS) situations, relate directly to normal squadron missions:
 - a. route, sector or area reconnaissance;
 - b. area security;
 - c. traffic control;
 - d. mounted escorts;
 - e. picketting (containment/isolation tasks);
 - f. snap road blocks;
 - g. crowd dispersal normally in support of infantry;
 - h. outer-cordons; and
 - i. communications.

- 3. In the conduct of most of these tasks, the principles and methods of execution will remain generally the same as for conventional operations described elsewhere in this manual. However, some significant changes to techniques may have to be made because:
 - a. The concept for the overall IS operation, and orders for the particular situation at hand may impose limitations such as the permissible degree of force; or
 - b. the task may be conducted jointly with police forces.

SECTION 2 - TECHNIQUES

1004. General

This section describes the circumstances in which some of the tasks outlined in article 1003 may arise and provides guidelines for each type of operation.

1005. Reconnaissance

- 1. A requirement will always exist to obtain information on ground, routes, installations, movement, and actions of opposing or dissident factions. Under stable conditions, route patrolling and static surveillance are the means by which information is gathered, and citizens are reassured as to the presence and protection of law and order. Conventional route, sector, or area reconnaissance techniques should be used on initial deployment of a force or in a hostile or unstable environment.
- 2. <u>Route Reconnaissance.</u> Route reconnaissance tasks may be required prior to the movement of military, police or joint forces and their supplies along a route to an area of operations or in advance of the movement of VIPs. This operation is not to be confused with convoy escort which would accompany the convoy. Although the type of information required and the threat of hostile action may. be different from normal operations, the techniques for route reconnaissance described earlier in the manual will usually be more than adequate. A route reconnaissance conducted outside built-up areas is a troop task.
- 3. <u>Sector and Area Reconnaissance.</u> When reconnaissance of a route through a built-up area is required, the technique will relate more to a sector reconnaissance because "adjacent terrain" becomes streets, alleys, and rooftops. Also, troops are required to picket those areas cleared by the leading patrols to ensure that infiltration does not occur once the patrols have passed. Barricades may also have to be constructed. Under these circumstances, the operation would generally involve all or part of the squadron, along with infantry or police forces. The protection offered by the vehicles their mobility and communications make them appropriate for:
 - a. rapidly establishing a cordon around a suspected area;
 - b. supporting rooftop/hilltop standing patrols; and
 - c. providing snap road blocks.
- 4. The use and limitations of mounted patrols are covered in B-OL-302-008/FT-002 (CFP 302(8), Part 11), articles 519 and 520.

1006. Area Security

1. Several aspects of conventional warfare make the reconnaissance squadron more capable than most other combat arms sub-units of carrying out several tasks implicit in the security of an

area. These are:

- a. training in the establishment and maintenance of coordinated OP network;
- b. training in the use of surveillance devices and techniques;
- c. training in foot and vehicle patrolling;
- d. training in the efficient and secure use of communications; and
- e. training in observation and recording.
- 2. Their mobile resources can best be employed in various circumstances requiring economy of force for instance:
 - a. the local patrolling and security of an airport or large complex;
 - b. the security of several widely separated smaller installations and their lines of communication such as power stations along given lines;
 - c. rapid cordon and snap road blocks; and
 - d. follow-up patrols after crowd dispersal.
- 3. When employed in densely populated areas the mounted squadron becomes highly vulnerable and vehicles of a purely military configuration may intimidate rather than reassure the population when used in numbers. Their use might thus be restricted in cases of limited unrest and, retained only in case of escalation. Reconnaissance vehicle should be employed with dismounted troops when confrontation appears imminent and always, at a minimum, in pairs when patrolling or on other tasks. The normal patrolling and OPs supplemented by a reserve or "rapid reaction force", techniques used in conventional area security, can be effectively applied from within squadron resources for internal security operations. For OPs, it is important to remember that rooftop and hilltop standing patrols are the most effective in built-up areas because of their relative discretion and wide coverage.
- 4. Coordination of patrolling, route reconnaissance, rapid cordon and snap road blocks, with available helicopter support to provide speedy reaction and rapid apprehension, are more appropriately done by the reconnaissance squadron which is stilled in coordinated operations of this nature with helicopters.

1007. Traffic Control

1. Assistance to military and civilian police in the control of traffic to include recce, signing and regulating of major routes and alternates, rapidly establishing traffic posts and road blocks are among the major benefits and assistance that can be provided by mounted reconnaissance

troops and patrols.

- 2. At squadron level, the mobile command post and communications permit the controlling and coordination of information when such coordination is required on short notice. The squadron is trained in traffic control and, as such, is more attuned to similar requirements in internal security operations.
- 3. Traffic control may be required for one or more of the following reasons:
 - a. regulation of traffic onto other routes in support of a cordon and search operation;
 - b. regulation of traffic because of a road or route, or part of it, is being sabotaged, or has been threatened to be;
 - c. regulation of traffic away from any dangerous areas;
 - d. regulation of traffic in support of a search or road block; and
 - e. regulation of traffic in support of our own movements.
- 4. The scale of these operations is variable but mounted reconnaissance troops are trained in duties relevant to these operations at both squadron or troop level.

1008. Mounted Escorts

- 1. In many instances of travel particularly in the case of a VIP, the safest and quickest means will be by helicopter. When helicopters are employed, however, the departure and terminal landing points must be secured and cleared of booby traps.
- 2. If travel must be by road, the normal pattern of convoy escort as discussed in Chapter 9, Section 2, should be employed.
- 3. Particular care must be taken in internal security operations to:
 - a. clear movement with local authorities;
 - b. avoid a regular pattern of movement;
 - c. convince the VIP to travel in less conspicuous means than a flag or staff car;
 - d. arrange rooftop coverage along built-up areas of route;
 - e. rehearse, plan and brief all concerned (including VIP) of drills in case of ambush along route and/or vehicle breakdown; and

f. maintain as much secrecy as possible about the convoy, its aim, timings and route. In this regard dummy or decoy operations should be considered.

1009. Picketting (Containment/Isolation)

- 1. In conventional warfare the process of picketting will imply:
 - a. maintaining contact with enemy;
 - b. defining his limit of deployment, type and size; and
 - c. reporting his activity.
- 2. In internal security operations the process is slightly different since the aim and environment would be dissimilar. The squadron may be called upon to rapidly deploy at various locations such as intersections and report upon movement into and out of an area. This might be in support of:
 - a. crowd or riot control;
 - b. cordon and search operations; and
 - c. in support of convoy escort or traffic control operations.
- 3. Although similar to the establishment of an OP, the importance is that the element designated to picket must have the ability and the order to contain or isolate a group or an area by physically denying entrance or exit. Suggested groupings could be as follows, always with the presence of civil authority:
 - a. a patrol by itself assisting police in a case of minimal danger;
 - b. a patrol or patrols supported by an infantry section or sections from support troop in the case of increased threat;
 - c. a series of pickets of patrol size supported centrally by support troop or an infantry platoon; and
 - d. a series of pickets rapidly deployed subsequently supported by infantry as required.
- 4. It is important that patrol commanders and troop leaders be advised as to the degree of discretion and of containment required and authorized. Constant contact with SHQ is most important under these circumstances.
- 5. The preparation and equipping of troops and vehicles is of particular importance in this

task, as confrontation would be likely in one form or another. Such things as authority for the electrification of vehicles, the wearing of complete anti-riot equipment, use of chemical weapons must be made absolutely clear in order to maintain the confrontation at its lowest possible level.

CHAPTER 11

SERVICE SUPPORT

1101. General

- 1. The principle of war, "Administration", has often been discussed and just as often ignored, normally with at least serious and often disastrous results. Service support (administration) is a vital and inseparable function of command at every level and it must be given its proper consideration if an operation is to run smoothly and efficiently. Administration is just one part of the overall military plan. Service support will not alone make an operation successful but without it, the operation will most certainly prove disastrous.
- 2. Successful administrative plans are based on the proven principles of foresight, economy, flexibility, simplicity and cooperation.
 - a. <u>Foresight.</u> The first preparations for any operation, however small, will be administrative. The administrative plan must be very closely tied to the tactical plan. Commanders at all levels must think ahead and anticipate administrative requirements. The operational mission must never be limited by lack of administrative foresight.
 - b. <u>Economy.</u> Demands must be kept to a minimum of essential requirements. Any tendency to overinsure must be repressed and reserves must be used for the purpose intended. A tight control on administrative assets is essential because of the potential isolation of the squadron.
 - c. <u>Flexibility.</u> The administrative system must be capable of working under all conditions regardless of deployment.
 - d. <u>Simplicity.</u> Only a simple administrative plan, easily understood by everyone, can withstand the shocks and jolts of war. Standard procedures should always be used unless it is absolutely essential to depart from them.
 - e. <u>Cooperation.</u> Team-work is vital. Administrative troops must make every effort to help F echelon crews which they support and the crews must reciprocate by giving timely warning of their needs and giving every possible assistance to echelons when they come forward.
- 3. In regard to the recce squadron, its characteristic of logistic economy implies a light but self-sustaining administrative tail. Planning must be thorough enough to limit, if not eliminate the need for daily resupply from the rear, through friendly lines and across dangerous and insecure terrain, in vulnerable echelon vehicles, with the risk of compromising the stealth required for the effective pursuit of the operation.

4. For this reason, the echelon is divided into three parts, which, depending on the operation, may operate centrally and will vary in composition. In addition, vehicles and troops must be as administratively self-sustained as possible for any given task.

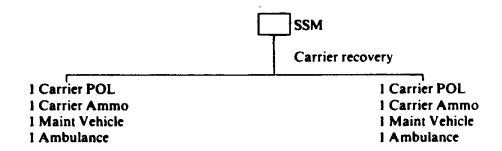
1102. Specific Echelon Considerations

- 1. In the normal squadron tasks of reconnaissance, and screening it would be ideal to use the standard echelon system described in articles 1103 and 1104. However, it is important that the following specific considerations be examined before tailoring the echelon of the squadron.
- 2. For stay-behind patrols, provision should be made to stock supplies in addition to those carried in the vehicle. Dumping along their return route should be considered as well.
- 3. For the security required in an OP line over prolonged periods, it might be advisable to reinforce A1 echelon supplies by requesting additional transport and supply from HQ squadron of the Armoured Regiment or from the Service Battalion. This would alleviate the difficulties of daily forward resupply.
- 4. In all operations, the use of helicopters must be considered since the transport of POL and several boxes of ammo by helicopter to an isolated patrol will save both time and effort. Bulk refuelling of the reconnaissance squadron is only possible under conditions of rear area security or similar operations where the risk is less and the operation more centrally controlled.
- 5. The ammo and POL carriers of A echelon may carry mixed loads and be attached to each troop if required.
- 6. Because of their area of operations, the members of the squadron echelon must be as effective reconnaissance soldiers as they are efficient support personnel.
- 7. The squadron Administrative Officer is the overall coordinator of administration within the squadron. He issues the necessary orders and controls the A2 and B echelon service support of the squadron in accordance with direction from the squadron commander.
- 8. The squadron, because of its tasking and location, might at times be required to tie-in its A2 or B echelon with that of a battle group other than its parent Armoured Regiment.
- 9. The squadron A1 echelon, commanded by the SSM, is the key administrative organization and its composition will vary radically from one task to another, unlike that of a tank squadron.

1103. Echelon Organization

1. The echelon system and staff planning guidelines are such that the troops carry approximately 24 hours of POL, rations and ammunition with them.

- 2. A further 24 hours is carried in the squadron administrative troop and the next day's supply is held in the armoured regiment's HQ squadron.
- 3. This is theoretical, since the recce squadron cannot be expected to carry certain specialized spare parts, but does carry, within its own organization, in excess of two days' POL under normal operations.
- 4. To provide the proper support, in conjunction with the need for discretion and security, the squadron administrative troop may be organized as follows:
 - a. <u>A1 echelon.</u> Those elements of the recce squadron administrative troop required for immediate replenishment of troops in combat supplies. This element normally commanded by the Squadron Sergeant Major moves in close proximity to the F echelon. A suggested composition is:



Because of the wide dispersal of troops and the need to resupply quickly, the A1 echelon may be subdivided into two identical groups. The SSM will also consider helicopters to speed up resupply.

- b. <u>A2 echelon.</u> This element of the recce squadron administrative troop contains elements not immediately required for the conduct of operations but which might have an important bearing if accessibility exceeds two to three hours. This element is commanded by the squadron administrative officer and is normally located with regimental A2 echelon. A suggested composition is:
 - (1) squadron administrative officer on the administrative rear link,
 - (2) maintenance warrant officers
 - (3) radio and line repair, and

- (4) maintenance stores.
- c. <u>B echelon.</u> This element of the recce squadron is located in the regimental B echelon. It comprises vehicles and stores not essential to the conduct of the battle. It is commanded by the SQMS who monitors the routine needs of recce squadron at regimental level and leads the squadron resupply to the DP for A2 and A1 as required. A suggested composition is:
 - (1) squadron quartermaster sergeant,
 - (2) stores vehicle,
 - (3) baggage vehicle, and
 - (4) kitchen vehicle.

1104. Resupply and Maintenance in the Field

- 1. The normal system outlined below may be seriously modified depending on the operational situation, and the recce squadron commander must provide clear guidance as to priorities and methods of resupply, repair and recovery.
- 2. To resupply the following types of demands may be submitted.
 - a. <u>Routine Demand.</u> A routine demand is a statement of squadron/troop needs that are required to be delivered on the resupply run for that day. Routine demands must be submitted in a correct format and by the time specified in SOPs.
 - b. <u>Supplementary Demands.</u> A supplementary demand amends the routine demand by adding or deleting items that are required to be delivered on the resupply run for that day.
 - c. <u>Emergency Demand.</u> An emergency demand is a demand for immediate resupply of critical items and is sent whenever necessary.
- 3. <u>Procedure.</u> The system of replenishment starts at the individual vehicle where the crew commander assesses his requirement for that day's resupply and passes this information to the troop WO. The troop WO compiles all of these requirements and prepares a troop ADREP. This ADREP is submitted by hand or by radio by the times specified in SOPs. A squadron demand is then compiled.

- 4. When the priorities of resupply are established the SSM sets out to replenish F echelon. If A1 echelon does not have enough to resupply the F echelon, additional resources are dispatched from A2 echelon. Once the F echelon has been resupplied, A1 echelon replenishes by exchanging empty vehicles for full vehicles at an RV with A2 echelon. Air resupply might also be used to replenish A1 or F echelon depending on the tactical situation. Once A1 echelon has been replenished, A2 echelon normally replenishes its holdings at a delivery point (DP). If A2 does not have the resources required to replenish A1, both A1 and A2 may be replenished at the DP.
- 5. The squadron's routine demand in all cases refers to the resupply for the next day. If the item required is not held within the unit's A2 echelon resources it will be delivered at the DP that night and as a result, it will not be received by the individual requesting the item until the resupply run the following day, ie, approximately 36 hours after request. However, if the item is of critical importance an emergency demand is made.
- 6. Maintenance. The squadron has its own maintenance section with technicians who are responsible for first line repairs. If the repairs are beyond their scope, SHQ is advised and second line maintenance support is requested through HQ squadron from the Service Battalion. The Service Bn will send mobile repair teams to repair vehicles in situ when possible. If in situ repairs are not possible the equipment is backloaded with squadron resources to an equipment collecting point. Repairs can be effected there or the veh is backloaded again by other resources to the appropriate repair or replacement facility.

1105. Other Considerations

- 1. <u>Water.</u> In operations there might be a scarcity of potable water and because of the difficulty of obtaining resupply through HQ squadron from engineer water points, proper planning and carriage of spare water cans will become most important. Water purification tablets are required at all times for the recce patrols.
- 2. <u>Casualty Evacuation.</u> Because of the area of operations and the vulnerability of the dispersed patrols of the squadron, casualty evacuation will be the major personnel problem. Suffice it to say that the following resources must be borne in mind when planning for casualty evacuation:
 - a. patrol vehicle;
 - b. helicopter;
 - c. tracked ambulance;
 - d. any echelon vehicle.

Casualties might have to be treated in location for longer periods than normally expected, due to the need for discretion of the operation.

3. <u>Reinforcements.</u> The high risk involved in reconnaissance operations imply heavy expected losses. The squadron B echelon must monitor the arrival of reinforcements and see to the needs and selection of replacements. Rarely will reinforcements be possible during an operation forward of the brigade and therefore maximum use of times of limited activity must be taken to bring the squadron up to strength.

TACTICAL CONTROL MEASURES

- 1. The following measures are normally given in the coordinating instructions of orders to simplify coordination and control of movement and to provide the commander with a degree of automatic feedback on the disposition of the troops under his command. They are particularly valuable when described by nicknames or codewords which can be easily referred to on the radio.
 - a. <u>Axis of Advance.</u> A route assigned for purposes of control to indicate the general direction of advance.
 - b. <u>Assembly Area.</u> An area in which tactical grouping of the elements of a force takes place prior to battle.
 - c. <u>Boundary.</u> A boundary is a line, where possible easily recognizable on the ground, which defines limits of responsibility, fire and manoeuvres between units and formations.
 - d. <u>Contact Point.</u> A point on the terrain, easily identifiable, where two or more units are required to make contact. (Junction Point also used).
 - e. <u>Harbour.</u> An area which permits the dispersal and concealment of vehicles and troops against the threat of enemy. They permit a commander to regulate the flow of his sub-units forward, and gives him the flexibility to change his order of march as the tactical situation changes.
 - f. <u>Objective.</u> A definite tactical feature, the seizure and/or holding of which is essential to the commander's plan.
 - g. Order of March. The order in which sub-units move.
 - h. <u>Phase Line.</u> These are imaginary but easily recognizable lines used to control timings, fire and manoeuvre during a phased operation.
 - j. <u>Reference Points.</u> A series of points on the map designed for reporting locations, and controlling movement. Although still used they only provide very short term security. Their use over a few hours will almost inevitably result in a compromise. The best method of sending exact locations is by the correct use of existing codes. Reference Points that may be encountered are:
 - (1) <u>Grid Intersection Point.</u> A point designated by a letter, which is defined by the intersection of a northing and easting grid line, selected at random. This point is a means of sending exact location, eg, "My position reference point Echo, East 1.5 (ie, 1500 m) South 1.5."

- (2) <u>Pogo Point.</u> A point designated by an easily definable feature and assigned a number, eg, "Pogo 46". Reference to this point is a means of sending approximate locations.
- k. <u>Report Lines.</u> These are imaginary lines, normally easily recognizable on the ground, which need not be of tactical significance. Where possible they should be at right angles to the axis of advance and will normally be reported automatically as leading elements of subordinate units approach them. They may be used to report approximate locations by indicating the distance in meters that you are plus or minus of the line.
- m. <u>Start Line.</u> A line designated to coordinate the start of an operation and which is crossed at H-hour by the leading elements. It must be a secure, clearly defined, or easily distinguishable ground feature, and preferably at right angles to the axis of advance.
- n. <u>Timings.</u> These measures can include the H-hour, rates of advance, speed of road movement, or the time by which an objective must be reached.

RECONNAISSANCE SQUADRON OPERATIONS WITHOUT RADIO

General

- 1. Annex C to CFP 305(1) outlines the principal circumstances under which operations will have to be carried out without the use of radios. This is all important to the recce squadron since the rapid and accurate passage of information is the role and "raison d'être" of the squadron. Two major circumstances exist when the use of radio might be limited or denied:
 - a. radio silence; and
 - b. effective jamming.

Radio Silence

- 2. Radio silence will normally be imposed to deceive the enemy of our presence and will normally be broken on contact. Prior planning and the coordinated use of the alternate means listed below will allow the squadron to operate normally under these circumstances:
 - a. reduction in troop frontages to allow rapid liaison;
 - b. use of alternate radio means such as HF (if authorized);
 - c. use of existing land telephone lines or laying of own lines;
 - d. establishment of timed RV/LO/DR programs;
 - e. use of helicopters for liaison;
 - f. use of hand signals or other visual signs;
 - g. provision of line or liaison from bde; and
 - h. other personal contact.
- 3. The rigidity imposed under these circumstances, seriously hampers the normal operation of the squadron but must be frequently practiced since the use of radio silence becomes more probable with the increased ECM threat. The brigade commander must be made aware of the limitations to the squadron caused by the imposition of radio silence.

Effective Jamming

- 4. The enemy will attempt to disrupt our communications through intermittent or persistent denial of the VHF band to the squadron. Without making them aware of their effectiveness, the squadron must attempt to work through, and/or make use of alternate means of communication within the squadron to overcome these efforts. Employment of an alternate HF net and the use of other frequencies should be practiced along with the acceptance of less than clear communications. If jamming is totally effective, it must then be physically circumvented. The following procedures must be regularly practised:
 - a. use of helicopters for liaison from squadron to troops and from squadron to bde HQ;
 - b. use of LOs and personal contact at predetermined times and places;
 - c. reduction of troop and squadron coverage to permit more effective liaison and control; and
 - d. use of line, visual and acoustic signals, and runners at troop and patrol level.
- 5. Under these circumstances, one of the main problems will be the provision and coordination of indirect fire support. It may be provided almost uniquely on a timed program. Because of the heavy reliance by recce squadron on indirect fire support, its location well in front or on the flank of the brigade, and the fact that it will most likely be the first to make contact, its input into and detailed knowledge of any fixed or sequential fire plan, will be of critical importance.
- 6. In order to lessen the havoc created by such a situation, SOPs must be devised and practised at squadron level and developed within the brigade to cater to circumstances of total and effective jamming. Some aspects that might be covered in squadron SOP are:
 - a. action of LO or designation of DR or helicopter and his actions upon confirmation of jamming;
 - b. Tp RV/LZ and their manning to receive sqn LO after a period of confirmed jamming;
 - c. information required from tp ldr by SHQ upon arrival of LO;
 - d. procedures for several tasks with reduced frontages to permit visual control imposed by EW; and
 - e. information/direction tp leader can expect from SHQ via LO.
- 7. The provisions of Annex C to CFP 305(1) provide further guidance which should be

considered when preparing such SOPs.

RECONNAISSANCE SQUADRON ORGANIZATION STANDARD BRIGADE GROUP

	Appointment/ Function	Vehicle	Call Sign	Remarks
<u>FECHELON</u>	OC BC CP Step Up LO OC's Rover Recce Tp Ldr Rccce Tp WO Ptl Vch Ptl Comd Ptl Veh Ptl Comd Ptl Comd Ptl Veh	CRV Carrier CP Carrier CP CRV Jeep CRV CRV CRV CRV CRV CRV CRV	49 4A 4B 49E Z49 41, 42, 43 41A, 42A, 43A 41B, 42B, 43B 41C, 42C, 43C 41D, 42D, 43D 41E, 42E, 43E 41F, 42F, 43F	
	Support Tp Ldr Support Sec Support Sec Support Sec Support Sec	Carrier Pers Carrier Pers Carrier Pers Carrier Pers Carrier Pers	44 44A 44B 44C 44D	Note: Two Carrier is equipped with a dozer blade.
ADM TP A1 ECHELON SUGGESTED	SSM Cargo Cargo Maint Maint Maint	Carrier Pers Carrier Cargo Carrier Cargo Carrier Fitter Carrier Fitter Carrier Rec Lt	49C 45 45A 48B 48C 48A	Note: Time. Space and Mission will dictate which echelon. This veh could be loc in F Ech
	Maint WO Amb Amb	Truck Lt Carrier Amb Carrier Amb	48 49F 49G	See note above See note above
ADM TP A2 ECHELON SUGGESTED	AO Cargo Cargo Kitchen	Truck Lt Carrier Cargo Carrier Cargo Truck Med	49A 45B 45C *	Could be located in B echelon
ADM TP B ECHELON SUGGESTED	SQMS Log Stores	Truck Lt Truck Med	49D 	

3.

a.

b.

c.

Operations of SHQ.

Message Handling.

Layout of SHQ.

SUGGESTED SUBJECT HEADINGS

RECONNAISSANCE SQUADRON SOPs

Organization for Battle

1. of:	Allocation of Resources. SHQ and troop organization into echelons including allocation			
	a.	personnel;		
	b.	vehicles;		
	c.	weapons; and		
	d.	vehicle loads.		
2. Groupings		ings		
	a.	common attachments to the squadron and normal grouping;		
	b.	command relationships; and		
	c.	affiliations if applicable.		
3.	Operational and Garrison Duties of Key Personnel.			
4.	Composition of R and O Groups.			
Command and Control				
1. levels.		of Command. Including the seniority roster for assumption of command at all		
2.	Battle Procedure.			

Allocation of personnel to vehicles, duty crew system, and routine.

- d. <u>Security of SHQ.</u>
- e. <u>Kitting of CPs.</u>
- f. Step up Procedures.
- g. <u>Distribution of Maps.</u>
- h. Radio Orders Format.

NOTE: Many of these headings may be covered in Regimental SOPs and it may not be necessary to repeat them in Squadron SOPs.

- j. O Group Procedures.
- k. Warning Orders Format.
- m. <u>Verbal Orders Format.</u>
- n. Regrouping Order Format.
- p. <u>Intelligence Cell Duties.</u>

Communications

- 1. Radio Nets
 - a. Allocation of Callsigns;
 - b. Order of Answering;
 - c. Collective Calls;
 - d. Communications, Electronics, Operating Instructions (CEOIs);
 - e. EW Drills and Procedures.
- 2. <u>Use of Line.</u>
- 3. Codes, and Voice Security Equipment. Including distribution, security and control.

Protection

1. <u>States of Readiness.</u>

- 2. Stand To.
- 3. Sentry Duties including challenging procedure.
- 4. <u>Camouflage Drills.</u>
- 5. <u>Local Alarm Systems.</u>
- 6. Protection Against Air Attack and;
- 7. NBCW to include warnings, states, monitoring and reporting.

OPERATIONAL REPORTS

Harbours

- 1. Reconnaissance Parties.
- 2. Occupation Drills.
- 3. <u>Layout.</u>
- 4. <u>Alarms for Crash Harbour.</u>

Leaguers

- 1. Occupation Drills.
- 2. <u>Layout.</u>

Operations with Helicopters

- 1. <u>Grouping.</u>
- 2. <u>Briefing Drills.</u>
- 3. <u>RVs.</u>
- 4. <u>Tactical Bases.</u>
- 5. Landing Zone Routine.

Night Operations

- 1. <u>Identification Lights.</u>
- 2. <u>Navigation Tips.</u>

Observation Post Procedures

- 1. <u>Battle Procedure.</u>
- 2. <u>Priorities.</u>
- 3. <u>Limited Visibility and Night Procedures.</u>
- 4. <u>RVs.</u>
- 5. <u>Employment of Helicopters.</u>
- 6. Resupply.

Traffic Control Procedures

- 1. SHQ Control.
- 2. <u>Traffic Posts.</u>
- 3. <u>Pointsmen.</u>
- 4. <u>Logs.</u>
- 5. <u>Employment of Helicopters.</u>

Swimming of Vehicles

- 1. <u>Peacetime Safety Limitations.</u>
- 2. Ballasting.

Road Movement

- 1. <u>Administrative Moves</u> to include pickets, speeds, densities, flags, communications and necessary procedures, etc.
- 2. <u>Defence on the Move.</u>

Logistics

- 1. <u>System of_Resupply.</u>
- 2. <u>Repair/Recovery/Backloading.</u>
- 3. <u>Medical and Dental Support.</u>
- 4. <u>Burials.</u>
- 5. <u>Services.</u>

AIDE-MÉMOIRE

SUGGESTED FORMAT FOR ROUTE RECCE ORDERS

1. This format should serve as a guide or checklist to the squadron commander when drafting his orders for a route reconnaissance. By no means exhaustive, its procedural layout will assist him in transmitting orders quickly. For radio orders only pertinent paras will be transmitted (see notes).

General Heading		Verbal Orders	Radio (Insecure)
1.	SITUATION a. Enemy Friendly Forces	(1) General to include intentions, activity, morale and equipment (2) Loc Strength Identity/Activity (a)	 (1) Changes only any changes locations encoded. if not originally sent in clear. (3) general only. (4) not transmitted (note 1) (5) not transmitted (note 1)
	b. Friendly Forces	 (1) Div Plan (2) Brigade Plan Leading units Flank protection (3) Flank activity 	 not transmitted (note 1) not transmitted (note 1) Both of these can be transmitted "no change" if applicable.
	c. Atts & Dets	Element Relationship Time (a)	Use C/S's and encode location and time.
2.	MISSIONS	To route with following limitations	Veiled speech if no change or local codes in SOP for types of missions.

	General Heading	Verbal Orders	Radio (Insecure)
3.	EXECUTION		
	a. General	(1) Outline and phasing. (2) PHASE 1 (3) PHASE 2 (4) PHASE 3	Use C/S to designate sub-unit and report lines to control.
	b. Grouping & TASKS	(1) 41 (a) Phase 1 i. Grouping ii. Task (b) Phase 2 i. Grouping ii. Task Phase 3 i. Grouping ii. Task (other Phases as required)	Use C/S to designate groupings and type missions in squadron SON for tasks.
		(2) 42 (a) Phase 1 i. Grouping ii. Task (b) Phase 2 i. Grouping ii. Task (c) Phase 3 i. Grouping ii. Task (3) 43 (a) Phase 1 (same as above) (4) 44 (a) Phase 1 (etc) (5) Helicopters (as applicable) (a) Phase 1 (etc) (6) Engineers (as applicable) (a) Phase 1 (etc) (7) FOO Party (as applicable) (a) Phase 1 (other phases as needed) - Location - Priority of fire (8), (9), (10) Spares.	
	c. Coordinating instructions	(1) Timings (a) H-HOUR (b) RATE OF ADVANCE REPORT LINE	

	Ge	eneral Heading		Verbal Orders	Radio (Insecure)
			(3)	REPORT LINES (as per trace or) (START LINE	
			, ,	than others along Route)	
				FROM TO NAME	
				(a)	
				(b)	
			(4)	ROUTE (NICKNAME) from	Coded for use on radio.
			(.)	to to	Coded for use of radio.
				to to (as needed).	
			(5)	Opening fire policy: Stated	Can be coded in squadron SON and
			(3)	<u>Opening the policy</u> . Stated	referred to numerically on radio.
			(6)	D.,	referred to numerically on radio.
			(6)	By-pass policy (all en by passed should be	
				picketted).	
				(a) size must be picketted.	
				(b) size might be by passed on order.	
			(5)	(c) Other.	
			(7)	Degree of Search: normally expressed in meters	
				relative to threat (ie, RPG7, or SAGGER range of	
				main route).	
			(8)	<u>EEI's</u>	
				(a) All phases.	
				(b) <u>Phase 1</u>	
				INFO ACTION	
				i	
				ii	
				(as needed)	
				(c) Phase 2 (,3 etc. as needed)	
			(9)	Air Defence	
				(a) action active/passive	
				(b) special considerations	
			(10)	NBCW Posture	
			(10)	(a) state	
				(b) special considerations	
			(11)	Fire Plan (if not on track)	
			(11)	TARGET GRID	
1	CE.	RVICE SUPPORT		(b)	
4.			(1)	Changes in composition.	Dr. C/S if massible
	a.	A1 ECH	(1)		By C/S if possible.
			(2)	Changes in deployment.	
			(3)	Priority of support.	
			(4)	Direction as to movement & location.	
	b.	A2 ECH	(1)	Direction & changes in composition including B	If applicable.
				ech.	
	c.	AMMO	(1)	Changes from SOP.	Code qty & type.
	d.	POL	(1)	Changes from SOP.	Code qty & type.
	e.	MEDEVAC	(1)	Any particular taskings.	
	f.	POW	(1)	Any changes from SOP.	
	g.	RATS	(1)	Any changes from SOP.	
	-			-	
	h.	RECOVERY	(1)	Any changes from SOP.	

Ge	eneral Heading	Verbal Orders	Radio (Insecure)
	MMAND AND		
SIC	GNALS		
a.	Location of OC	Proposed Location and move	Could be a coded GR or a generalized
			statement in reference to control
		(4)	measures.
b.	Present and	(1) Present	Encoded.
	Proposed location SHQ	(2) Proposed	Encoded.
	location SHQ	(2) Proposed	Encoded.
c.	Special Signals	(if not id SOPs)	
C.	special signals		
d.	Codewords	<u>CODEWORD</u> <u>MEANING</u>	Note 1
		(1)	
		(2)	
		(3)	
	~		
e.	Grid Inter-	(1) effective to (date/time)	
	section Points	<u>LETTERS</u> <u>GRID</u>	
		(2)	
		(3)(4)	
		(+)	
f.	Changes to CEOI's		See Note 1
	-		
g.	Radio Silence		
1.	D	Commo (1.4. // m.) 4. 1.4. //	
n.	h. Password from (date/time) to date/time.		
i.	Other		
TIME C	HECK/QUESTIONS		
in	mins.		

NOTES:

- 1. The information noted might be of much importance to the enemy and will not be transmitted by insecure means. If an entire change has occurred two options exist.
 - a. encoding all in OPS CODE;
 - b. delivery of info by helicopter or liaison officer.
- 2. In all headings the numerical indicator of the orders format can be used for radio orders as follows:
 - a. "Reference Orders, para ONE CHARLIE TWO ALPHA, C/S 41, ADDRESS GROUP WHISKY CHARLIE SIERRA "Couple" ALPHA TANGO, SIERRA NOVEMBER, X-RAY UNIFORM, MIKE CHARLIE "un couple", "couple" DELTA INDIA, KILO VICTOR, LIMA QUEBEC, "un couple".
 - b. This indicates that first troop is detached to the Armoured regiment at a given location and must be there at a specified time. A search through his CEOI's would give troop leader the frequency. If needed, he would query SHQ.
- 3. This type of format can be used for all types of reconnaissance and surveillance missions and modified as per the situation. Examples for a sector or area reconnaissance will vary mostly in the execution format. Radio Order Formats can be designed at squadron level to cover most important aspects of most tasks.

AIDE-MÉMOIRE

FOR ORDERS FOR A SECTOR RECONNAISSANCE

- 1. Essentially, most headings as shown in Annex E may be employed as needed. Particular concerns relative to the sector reconnaissance are mostly contained in the Execution, Service Support and Command and Signals paragraphs. This aide-mémoire will spell out these differences.
- 2. Troops can be keyed to this type of mission by an SOP codeword or number.

			Format	Remarks
1.	<u>SITU</u>	ATIO	<u>N</u>	
2.	MISS	SION		
			tre sector between and	Either boundaries or given report lines. Any specific timing should
3.	EXE	CUTI	ON	be included.
	a.		ral. The squadron commander will give the breakdown of rs and designate a reserve. Outline and phasing.	Similar to Annex E
	b.	Grou	ping & Task. The following detail will be covered.	
		(1)	Recce Troops	
			(a) Detailed grouping by call sign for each phase.(b) Detail of any area recess to be conducted at troop level.	
			(c) Assignment of liaison or contact missions.(d) Tasks on completion of missions.	
		(2)	Support Troop	
			(a) Grouping and tasks.	If all sections are detailed to
			(b) Any deployment of surveillance equipment with specific targets.	support the recce troops, the troop leader follows SHQ and acts as
			(c) Possible specific foot patrolling missions or recce of key woods, towns or defiles.	additional LO/duty officer.
		(3)	Artillery	
			(a) Assign FOOs if more than one.(b) Direct preparation and provide guidance as to CFSP.	

		Format	Remarks
	(4)	<u>Helicopters</u>	
		 (a) Grouping to recce troops. (b) Special tasks: area reconnaissance, flank reconnaissance of routes into the brigade area. liaison tasks, picketting tasks, radio relay and med evac. 	In periods of poor visibility, duty officer and night commander prepare detailed "in-night" as soon as visibility permits. in Personal briefing by troop leader in situ still required.
	(5)	Engineers	
	(-)	(a) Assignment to troops.	Engr recce relies on recce troops for protection. Elements are deployed forward but are tasked by the Field Squadron.
c.	Coor	dinating Instructions	
	(1)	<u>Timings</u>	
		 (a) H-Hour (b) H-Hour for Battle Groups (c) Timings of objectives to be secured or phases to be completed by Battle Groups. (d) First and last light. 	
	(2)	Contact Points Those between troops and those to be manned on order from We HQ.	Locations/timings and frequencies must be given for the latter.
	(3)	Degree of Search. Normally given with reference to report lines. It will also include: (a) any particular area recces, (b) lateral search of main routes in sector, (c) secondary route requirements, (d) action in built-up and wooded areas, and	Should not be too restrictive and should permit the troop leader to conduct a less regorous search should the situation so warrant for reasons of momentum and time.
		(e) rate of advance by timings/report lines	
	(4)	Action on Contact	
		 (a) by-pass policy, (b) opening fire policy, (c) picketting policy, (d) control measures when passing over the contact to follow-up units. 	

				Format	Remarks
		(5)		tial Elements of Information	Brigade may direct certain elements of information eg, alternative
			(a) (b)	class 50 routes. location strength and activity of enemy,	crossing to a bridge or main route or a chemical monitoring task.
			(b) (c)	class 50 by-pass or secondary routes,	of a chemical monitoring task.
			(d)	battle group harbours and FU P's,	
			(e)	assault routes to main objective or enemy	
			(0)	contacts on route.	
		(6)	Repoi	rt Lines and Reference Points	These must be assigned and approved by brigade.
		(7)	<u>Limit</u>	of Forward Advance (if applicable).	Selected by bridge.
4.	Durin	g this	-	RT on options as described in Chapter 11 should be cular the allotment of an M548 to each troop sector.	
5.	COM	[MAN]	D AND	SIGNALS	
	a.			Squadron Headquarters.	
	b.	conta		ee. Radio Silence is normally imposed until first ade or information is required and obtained on a FFI	
	c.	Code	_	In addition to the normal codewords the following	These are to be cleared by Brigade Headquarters.
		(1)	occup	by contact point,	
		(2)	-	t contact, and	
		(3)	break	contact.	
	d.	Frequ	iency o	In addition to normal CEOI's, troops should have f battle group/and its recce platoon or other troops in their sector.	

FOR ORDERS FOR AN AREA RECONNAISSANCE

1. As discussed in the section on area reconnaissance, this task is similar to a combination of route reconnaissance and limited sector reconnaissance. The recce of an area within troop control during any of the above tasks will fall within the formats at Annexes E and F. This annex then is an aide-mémoire for an area reconnaissance mission at squadron level and should be read in conjunction with Annex F for more complete coverage of all points.

			Format	Remarks
1.	SITU -	as on there	gard to the enemy, the route to the area should be selected e where contact is least likely. Detail on enemy is fore important and must be so stressed. In this regard en lling habits should be covered if applicable.	Similar to Annex E
2.	(desig	gnate)	Γο reconnoitre area by	
3.	EXE	CUTIC	<u>ON</u>	
	a.		ral normal phasing will consist of move to area, sector recce n area and action on completion of recce of area.	Similar to Annex E
	b.	Tasks	s and Grouping	
		(1)	For each phase as mentioned above tasking and grouping of troop is given.	Similar to Annex E
		(2)	Helicopter. Should be employed to speed up movement and limit the possibility of ambush. Two or three hel sections to the lead troop when the squadron is advancing rapidly on one axis should be considered. The principle is to approach the area as rapidly as possible in a concealed manner.	

		Format	Remarks
((3)	Artillery. Because of the greater distance of operation from the FEBA, thorough coordination of close support, divisional artillery and FGA must be made such that the squadron is not caught out of range. Close supervision of the CFSP by the squadron commander and subsequent regulation of troop movement is the key to this support.	
((4)	Other. Particularly engineers, might require escort protection if combat divers and/or other specialist forces are attached. Infantry support might be provided or perhaps even LOs from Battle Groups.	
c. <u>(</u>	Coord	linating Instructions	
((1)	Timings	
		 (a) H-Hour (b) H-Hour of Battle Groups (c) Any other pertinent timings such as timing of FGA missions or of a timed artillery program or time by which area recce is to be completed. 	
((2)	Critical Points Any contact points, or particular defiles or spots within the area, along with action and timings required.	
((3)	Report Lines, Routes and Observation Targets All of these are to be preplanned, coordinated and approved by brigade prior to departure.	Most can be done at the Brigade O group after map recce.
((4)	Action on Contact	
		 (a) Opening Fire Policy. Should be clarified such that primary mission is not jeopardized and might vary for each phase. (b) By-pass and Picketting Policy. Same as above. 	Similar to Annex F for remainder.
((5)	EEI's The pertinent data required by brigade should be clearly spelled out here.	Similar to Annex F.
((6)	Air Defence Particularly in this type of operation passive protection against FGA and helicopters by use of covered routes and concealment must be stressed.	
((7)	NBCW Posture Any monitoring tasks that might be required in area.	

	Format	Remarks
	(8) Fire Plan This must be well coordinated as mentioned above and troops informed and aware of locations timings and any restrictions.	
. <u>SEI</u>	RVICE SUPPORT	
a.	Resupply Resupply prior to move is essential. Normally only A1 echelon will move with squadron, A2 and B remaining behind FEBA. Breakdown of A1 should be carried out if more than one route is employed.	Remainder similar to Annex F.
b.	Recovery Recovery of vehicles should not take place until after main force has passed broken down vehicle. Vehicle should be either left in situ, towed to concealed location with crew or destroyed if too far forward and repairs cannot be effected. Recovery of downed pilots should be effected by any reserve or by echelon.	
c.	POW The pace and task may not allow prisoners to be guarded or fed back. Important prisoners could be brought to POW cage by helicopter, other should be immobilized reported and tagged. Echelon must assist in this.	
d.	Med Evac. Medical evacuation of serious casualties can be done by helicopter but remainder must be treated in situ and evacuated at a later time.	Chapter 11 covers possible solutions.
. CO	MMAND & SIGNALS	
a.	Location of Squadron Headquarters. The movement of SHQ is important and in the move to the area proper step-up drills must be stressed and troops advised of planned locations.	
b.	Radio Silence. Radio silence is normally imposed and might even include minor enemy encounters on route to area, if they do not affect our progress. Helicopter liaison should be considered for passage of information to Brigade Headquarters. Low power transmission at troop level and use of HF net should also be considered.	
c.	<u>Frequencies</u> . Troops must be informed of frequencies and C/S or Address Groups of friendly forces they are required or likely to contact. These might include any covering force or flanking troops.	

d. <u>EW</u>. Use of radar or other active devices en route should be restricted.

FOR ORDERS FOR A SCREEN OPERATION

1. Only those points of particular importance to the screen have been covered. Annex F provides aidemémoire for other standard detail.

			Format	Remarks
1.	SITU	ATIO	<u>N</u>	
	a.	Enen	n <u>y</u>	
		(1)	Present locations, units and strengths	
		(2)	Likely courses of action and approaches	
		(3)	Patrolling habits	
		(4)	Air Situation	
		(5)	NBCW Threat	
		(6)	EW Threat	
	b.	Frien	<u>dly</u>	
		(1)	General statement of Brigade Commander's intentions and defensive plan.	
		(2)	Exact locations of friendly units/sub-units in area including nanking formation.	
		(3)	Locations of forward Battle groups.	
		(4)	Any friendly activity, ie, patrolling activity, engineer activity forward of obstacle.	This should include the barrier plan.
		(5)	Any friendly covering force elements likely to withdraw through brigade area with general passage of lines plan.	
	c.	Atts	and DETS	
		(1)	Forces attached to form screen including call signs.	
		(2)	There should normally be no subunits detached.	

				Format	Remarks
2.	MISS	SION			
	To so	reen tl	ne Briga	ade defensive positions forward of	Given report line to act as battle group recce limit of deployment.
3.	EXE	CUTIC	<u> </u>		
	a.	norm	ally cor	e deployment of the squadron on such a task will assist of the following phases; deployment of the ation of the screen, withdrawal of the screen and asks.	Should include changes at squadron level to be brought on by night and conditions of poor visibility.
	b.	Grou	ping an	d Tasks	
		(1)	Recce	troops:	Support troop elements operate be
			(a)	specific grouping for each phase;	sit in a surveillance role when centrally controlled. The enemy situation and the ground, however,
			(b)	assigning of observation targets;	might impost detailling elements to cover approaches and patrol
			(c)	assigning any control measures such as contact points; and	within recce troop sectors under their control.
	(d) action on withdrawal behind patrols.		(d)	action on withdrawal and provision of any stay- behind patrols.	
		(2)	Suppo	ort troop.	
			(a)	grouping, if any;	
			(b)	surveillance arcs, approaches or targets;	
			(c)	patrolling tasks (including stay-behind); and	
			(d)	tasks on withdrawal.	
		(3)	Artille	ery	
			(a)	assign FOO to recce troops if more than one is available	
			(b)	establish priority of fire and designate specific targets	
			(c)	have fire plan completed.	

			Format	Remarks
	(4)	Helic	copter Recce Flight	
		(a)	Details of reconnaissance plan, ie, helicopters available to troops to recce target areas.	Helicopters are not normally assigned to troops other than for the recce of the screen positions.
		(b)	Patrol tasks to cover gaps.	
		(c)	First and last light sorties.	
		(d)	Liaison tasks required by the squadron commander.	
		(e)	Tasks to assist in picketing and withdrawal of the squadron.	
	(5)	Othe	rs:	
		(a)	Engineers and/or armour and infantry may be allocated to reinforce the screen. Tasks would be given according to priority of delay required at end approach.	
c.	<u>Coo</u> 1	rdinatir	ng Instructions	
	(1)	<u>Timi</u>	ngs	
		(a)	Time by which screen must be in operation	
		(b)	First and last light	
		(c)	Time by which recce must be completed	
		(d)	Anticipated duration in OP line	
	(2)		act Points. Location, time, necessary signals mation, special procedures.	Especially for withdrawal of covering force elements and flanking formations/units.
	(3)	Esse	ntial Elements of Information	
		(a)	Location, size, identification and activity of enemy.	
		(b)	Any special weapons such as NBCW, helicopters, etc	
		(c)	Assault forces including bridging.	

			Format	Remarks	
		(4)	Action on Contact		
			(a) Report and remain hidden.	Action will depend on aim of operation but normally this will be	
			(b) Picked up by reserve (or by helicopters and picketted.	as indicated.	
			(c) Contact passed to battle groups.		
		(5)	Action if Engaged		
			(a) Troop Leader to select RV to which patrols can withdraw.		
		(6)	Withdrawal Route(s)	To include control measures when moving through friendly lines to new task after withdrawal across FEBA.	
		(7)	Reference Points	These should be common to all Brigade units and issued by brigade. It is particularly important during the withdrawal phase that the location of screen elements can be given quickly and accurately.	
		(8)	Observation targets	Brigade may designate particularly vital observation targets.	
		(9)	Special Instruction for Stay-Behind Patrols		
		(10)	Light and Active Surveillance Policies		
4.	<u>SER</u>	VICE S	<u>UPPORT</u>		
	a.	Resu	pply	Much of the contents of this section is Standard Operating	
		(1)	Screen forces including Echelons must be topped up prior to going into the screen.	Procedures. The points mentioned are peculiar to the screen and are covered in Chapter 11.	
		(2)	Any special procedures for lop-up in the screen.	The state of the s	
		(3)	Resupply procedure when withdrawal phase is complete.	Normally screen will withdraw to a single hide previously selected by the Echelon.	

		(4) Resupply or dumping for stay behind patrols.	
	d.	Prisoners of War Special requirements for the handling of POWs captured in the screen.	This is a particularly difficult problem. The normal procedure is to take prisoners to a convenient location where SHQ organizes some means of picking them up. The reconnaissance flight is sometimes used to quickly move important prisoners.
5.	COM	IMAND AND SIGNALS	
	a.	Location of SHQ Contact with all troops is a dominant consideration. Radio Relay within the squadron should be considered but kept to a minimum as each such mission reduces the ability of the squadron to observe and report.	The sitting of the headquarters within the screen will sometimes require radio relay to be dispatched from brigade HQ.
	b.	Net checks: There will probably only be one before silence is imposed. A fixed timing slightly before H-Hour is recommended.	The sending of OP reports can be time-consuming and it is therefore recommended that they be picked up by helicopter for SHQ prior to H-Hour.
	c.	Codewords. In addition to the normal codewords, codewords for the following arc normally required.	
		(1) Observation targets covered	
		(2) Break contact and withdraw	These must be authorized by Brigade Headquarters and this
		(3) Sub-unit complete on friendly side of obstacle	should be done by Sqn OC prior to departure on his recce.
		(4) Occupy contact point (followed by a number)	

FOR ORDERS FOR A FLANK SURVEILLANCE OR GUARD TASK

This situation of a flank surveillance or flank guard task requires coordination similar to the screen. However, when this surveillance or security force is mobile the coordination and planning aspects become more important. Because of its complexity, the orders format that follows will deal with a mobile flank guard operation as this situation covers most points in any operation order for flank surveillance and/or security.

			Format	Remarks
1.	<u>SITU</u>	ATIO	<u>N</u>	
	a.	<u>Enem</u>	<u>ny</u>	
		(1)	Particular emphasis on the threat to the flank. Liaison with flanking unit or formation to complete the picture is normally required.	
	b.	<u>Frien</u>	dly.	
		(1)	Detail as to bdrys. mission. progress, unit designations of flanking formation is essential.	
		(2)	Details of the brigade plan and (hat of the unit whose immediate flank is being protected are required.	
	c.	Atts a	and Dets	
		(1)	In a guard mission particularly, the RV time and location of attachments must be given.	
		(2)	The primary need is for anti-tank resources of some kind, but a requirement also exists for artillery support, infantry and air defence.	
2.			To provide flank security (or surveillance) ade advance.	Designate by geographical reference.
3.	EXE	CUTIC	<u>ON</u>	
	a.	used phasi estab by an	eral. Here it is important to designate the method to be (caterpillar, leap-frog or mobile) and to establish the ng of the operation. Normally, a screen will be lished supported by blocking positions in depth, manned by additional forces and based on likely enemy baches.	See Chapter 6, art 609.

			Format	Remarks
b.	<u>Grou</u>	iping an	d Tasks.	
	(1)	Recce	Troops	
		(a)	Are either tasked to form screen or to act as part of blocking force.	
		(b)	Positions or observation targets to occupy.	
		(c)	Must be prepared to occupy positions on order.	
	(2)	Suppo	ort Troop	
		(a)	Normally part of delaying force or detached to various elements of such a force if large enough.	
	(3)	Helico	<u>opters</u>	
		(a)	Patrols gaps between delaying positions.	
		(b)	Patrol area between screen and flanking unit.	
		(c)	Be prepared to relieve ground troops or augment surveillance on certain observation targets.	
		(d)	Be prepared to maintain visual contact with minor elements infiltrating the screen.	
	(4)	Artille	ery	
		(a)	A CFSP must be produced to support both observation targets and blocking positions.	
		(b)	It is unlikely that any battery will be in DS of a flank guard. Targets must therefore be most carefully selected.	
		(c)	Helicopter pilots should be used to call down and correct fire when available.	
	(5)	Other		
		(a)	Task anti-tank resources according to selected blocking positions.	
		(b)	Task infantry resources with close support of tanks or antitank in blocking positions or to prepare ambushes along likely routes or finally to be prepared destroy light enemy elements.	

			Format	Remarks
c.	Coor	dinatin	g and Instructions	
	(1)	<u>Timiı</u>	ng,	
		(a)	H-Hour for brigade.	Squadron will most likely conduct preliminary move to occupy initial
		(b)	Time by which initial flank security must be established.	positions ahead of H-Hour for. brigade
	(2)	advar	of Advance. Anticipated rate of (he Brigade nce. Movement from one position to the next on of SHQ.	
	(3)		tion of Delay. The amount of delay which must be sed on the enemy (if any).	
	(4)	Conta	act Points	
		(a)	Between brigade and flanking formation.	At any rate, liaison and easily communication must be made and
		(b)	Between flanking formation and brigade units.	accessible throughout with all of these. Tasking of Squadron LO to
		(c)	Between troops, if any.	flanking unit of flanking formation should be sought.
		(d)	Between nanking brigade unit and recce squadron if needed.	
		(e)	Routes Between Delaying Positions. It might become critical to designate routes between blocking positions to cover the withdrawal of screen patrols and of blocking elements en route to new task or for reasons of fire control.	Should not be such as to unduly restrict troop flexibility.
		(f)	Action on Contact	
			i. the opening fire policy must be clear, remembering the vulnerability of the brigade flank, the delay to be imposed and the capacity of the recce vehicles to destroy enemy recce elements	
			ii. no by-passing is normally permitted; all contacts are picketted until destruction	

				iii.	low flying Fixed wing aircraft and helicopters should be engaged if possible and within range	
				iv.	picketting tasks for helicopters.	
		(5)	EEI's			
			(a)	Locati	on, strength and direction of enemy force.	
			(b)	Any e	nemy obstacles encountered.	
			(c)	Move	ment of friendly flanking formations.	
4.	SERV	VICE S	SUPPOI	<u>RT</u>		
	a.	-		-	ould be resupplied as they move from one nce position to another.	A1 echelon may be split and move along at rear of blocking positions to perform this task.
	b.	Reco	very. No	ormal re	ecovery procedures should be possible.	
	c.	back, repor	most w	rill be d n. SHQ	portant prisoners that may be quickly sent isarmed. tagged, immobilized and will attempt to have them picked up by	
5.	COM	IMAN.	D AND	SIGNA	<u>als</u>	
	a.	imply Centi	that on	e part of the	nent of SHQ. Movement will most likely of SHQ is constantly changing location. he HQ is essential because of the	
	b.		iencies. s such a		array of frequencies arc essential to	
		(1)	brigad	e flanki	ng unit,	
		(2)	flankir	ng form	ation,	
		(3)	flankir	ng form	ations' unit, and	
		(4)	any ot	hers for	any contact points.	
	c.				ion to the normal codewords the sought:	Approved by Brigade HQ and disseminated to units.
		(1)	Codew		number - occupy given contact point or	
1						!

(2)	position or contact point occupied;	
(3)	move to secondary task; and	
(4)	secondary task complete.	

FOR ORDERS FOR A REAR AREA SECURITY TASK

1. Because of the great variations possible in such a task, this aide-mémoire, although useful, should be handled a little more critically than the others. Religious adherence to this format could prove both dangerous and misleading.

			Format	Remarks
1.	SITU	J ATIO	N	
	a.	Enen	ny. The following details should be given:	
		(1)	Any known infiltration into rear area.	
		(2)	Enemy methods of operation including:	
			(a) airlanded operations,	
			(b) clandestine operations, and	
			(c) local subversives.	
		(3)	Any aids to recognizing clandestine operations.	For example, discovery of a control team means at least three clandestine teams are operating in the area.
	b.	Frien	adly. The following details should be given:	
		(1)	General description of Brigade's intentions.	
		(2)	Location of friendly units in area including exact location of Service Battalion sub-unit headquarters.	
		(3)	Routes used by friendly forces.	
		(4)	Service Battalion defence plan.	
		(5)	Local civilian authorities methods of control.	
	c.		composition of the reaction force by call sign.	If an attached or composite force is designated.
2.			The reconnaissance squadron will ensure the security of rear area.	

				Format.	Domonico
3.	EXE	CUTIO)N	Format	Remarks
	a.	Gene	<u>ral</u> . De	scription of main OPs, patrols, reaction force and a with in-situ units.	
	b.	Grou	ping an	ad Tasks	
		(1)	Recce	e Troops	
			(a)	grouped with surveillance or other elements may be tasked to provide OPs at vital points throughout their sub-area.	Area may be sub-allotted to troops or troops rotated through various tasks throughout entire area.
			(b)	may be tasked as part of rapid reaction force.	
			(c)	may be required to patrol over a given route or series of routes.	
			(d)	must be prepared to conduct convoy escort.	
		(2)	React	ion Force	
			(a)	Location and Grouping.	
			(b)	Notice to move.	
			(c)	Priority of threat.	
			(d)	Be prepared for hellborne operation.	
		(3)		opters uct of air and ground surveillance of rear area, at llar intervals if available.	Transport helicopters might be available for troop lift.
		(4)	Artille Most	ery targets in the rear area are "on call".	
		(5)		forces which might fall under command such as various OPs set up by units in rear area.	
	c.	Coor	dinatin	g Instructions	
		(1)	Timir	ngs	
			(a)	Time by which initial surveillance must be established.	
			(b)	Time by which security forces must be in place.	
			(c)	States of alert for various elements of rear area.	

				Format	Remarks
		(2)	Contr	ol Measures	
			(a)	Rehearsals of alert measures.	Depending on the likely duration of task, possible threat and many
			(b)	Routine contact with friendly forces in area by such means as liaison and telephone line.	other factors some or all of the measures listed could be implemented.
			(c)	Siren or other alerts.	
			(d)	Regulation of traffic on routes particularly at night.	
			(e)	Patrolling plan.	
			(f)	Light policy in rear area and coordination with local authorities.	
			(g)	Obstacle plan for likely landing and drop zones if time permits.	
			(h)	Digging and camouflage policy.	
4.	SERV	VICE S	UPPO	<u>RT</u>	
	Normally carried out in troop harbours. Echelon should avoid following standard routes.				Liaison with police and local authorities for the control of refugees might become most important. They must be kept off key routes and way from vital points.
5.	COM	<u>IMANI</u>	O AND	<u>O SIGNALS</u>	
	a. <u>Location of Squadron Headquarters</u> . It should normally be centrally located and might have a deploy a rebroadcast station, given the normal coverage of the area.				Liaison with CO Service Battalion as local commander is normally required for approval of security plan.
	b. <u>Confirmatory Orders</u> . Once the troops have established surveillance, patrolling, locations of vital points landing and drop zones, the plan must be further refined and coordinated.				
	c.	Code	words.	Special codewords are required for:	
		(1)	Area	surveillance complete.	
		(2)	Vital	point number guarded.	
		(3)	Vario	us levels of alert.	
		(4)	Rehea	arsals (if applicable).	

	Format	Remarks
d.	Frequencies	
	(1) All call signs of security forces on one net.	
	(2) Troops require call signs of friendly units.	
e.	Radio Silence	
	(1) Radio Silence will quite often be implemented throughout the rear area. After initial net check and establishment of security, silence should be imposed.	
f.	Personal Contact During these tasks the OC should visit all troops and installations/OPs in his area.	Personnel must be kept aware of and alert to the importance of the task.

FOR ORDERS FOR A TRAFFIC CONTROL ORGANIZATION

This Annex will serve as a guide to outline the salient points that should be considered when the reconnaissance squadron is tasked with traffic control of a brigade move. The tactical, geographic, climatic and night or daylight aspects will have serious bearing on the movement and will certainly modify some of the points herein listed.

			Format	Remarks
1.	<u>SITU</u>	ATIO]	<u>N</u>	
	a.	tactic on. C	ny. Since this type of task can be performed in many cal contexts. it is important that all en activity be passed of particular importance, in the selection of harbour or areas, will be the en air and artillery habits.	
	b.	Frien	dly	
		(1)	Divisional and Brigade plan should be given.	
		(2)	Any passage of friendly lines should be outlined.	
		(3)	Location and identity of any flanking units or other friendly activity in vicinity of the controlled area.	
	c.	Atts	& Dets	
		(1)	To perform this task effectively, normally MP platoon and helicopter reconnaissance night should be placed under command.	
		(2)	LOs from units and other forces including Service Battalion elements might be attached.	
2.	MISS	SION.	To control the move of the brigade from to	
		Location	on location.	
3.	EXE	CUTIC	<u>ON</u>	
	a.	in the organ finall squad	real. The traffic control task will normally be carried out ree phases as follows: recce and establishment of control nization, regulation of traffic through that system, and y, reorganization and redeployment of the squadron. The dron will normally form a regulating HQ and Sector HQs e area controlled.	Helicopters should be made available to troop leaders for local recce if time and situation permit.

			Format	Remarks
b.	Task	s and C	Groupings.	
	(1)	Regu	lating HQ.	
		(a)	Composition and location.	
		(b)	Tasks.	
	(2)	Each	Sector HQ.	
		(a)	Composition and location	
		(b)	Recce tasks for harbours/halts, primary and alternate routes.	
		(c)	Traffic to be regulated through the sector.	The brigade movement table should be distributed.
		(d)	Traffic posts to man.	
	(3)	Start	and Release Point Teams	These may or may not be
		(a)	Composition.	subordinate to a sector HQ.
		(b)	Tasks.	
		(c)	Traffic post to be manned.	
	(4)	<u>Halt</u>	Area Group	
		(a)	Composition.	Combat Service Support elements are normally attached for resupply.
		(b)	Tasks of signing and regulating.	are normany attached for resuppry.
		(c)	Local protection.	
c.	<u>Coo</u> 1	dinatin	g Instructions	
	(1)	<u>Timi</u>	ngs	
		(a)	Squadron H-Hour.	
		(b)	Time by which control organization must be established.	
		(c)	All other timings including start times, time in halt. assembly or other such areas arc either part of the brigade movement order or given as guidelines and directed from regulating HQ.	

				Format	Remarks
		(2)	Order	of March	
			(a)	For Traffic Control Organization.	
			(b)	For Brigade from movement order.	
		(3)	Critica	al Points	
			(a)	Assembly, Halt or Crossing Areas	
			(b)	Defiles.	
			(c)	Alternate routes.	
			(d)	Traffic Posts.	
			(e)	Reference Points and Report Lines.	
		(4)	Packe	t Identification and Verification System	Identification of packets by their
		(5)		Light discipline and Local Protection	numbering will be coordinated at brigade staff level and must be made available to all traffic posts.
		(6)		March Discipline	made available to all traffic posts.
		(7)		Action or Contact to include against enemy air activity	
		(8)		Route Signing	
		(9)		RV or action on completion of main task	
4.	SERV	VICE S	<u>SUPPOI</u>	<u>RT</u>	
	a.	norm is req remai	ally by uired in ins of e	d replenishment for the squadron is done topping up prior to task, detaching what support a each sector and manning start point with what chelon so that replenishment can be carried out as is rolled up at end of mission.	
	b.	All o	ther asp	ects should be as per SOP	

		Format	Remarks
5.	CON	MMAND AND SIGNALS	
	a.	Location of Higher HQ and communication and liaison means.	
	b.	Location of Regulating HQ.	
	c.	Radio Silence. Rules for radio silence on such a task will imply that control organization would have to rely on line, or liaison or civilian telephone for proper control, radio being used after the net check solely for back-up in emergencies.	
	d.	Radio Relay. Depending on distances and mission, a requirement for radio relay might exist and provision should be made.	
	e.	<u>Frequencies</u> . The entire organization should be on a single frequency. Traffic posts should have frequencies for various units as they go through their sector.	
	f.	<u>Codewords</u> . Codewords are required for:	
		(a) control organization established	
		(b) last serial through location; and	
		(c) through release point.	
	g.	<u>Liaison</u> . Liaison at Start Point and Release Point is required for each unit to confirm Brigade movement plan.	

FOR ORDERS FOR A CONVOY ESCORT TASK

The information contained in this Annex covers the type of consideration that a squadron commander must foresee when launching the squadron on a convoy escort task. Similar considerations apply at troop level for lesser escorts. If the squadron must control several troop level escorts, its role becomes one of monitoring several plans similar to this one.

		Format	Remarks
1.	SITU	JATION	
	a.	Enemy. The general enemy threat similar to any other operation must be given, but normally emphasis is placed on:	
		(1) air activity;	
		(2) clandestine activity;	
		(3) long range patrols and air landed threat;	
		(4) enemy artillery habits; and	
		(5) danger of mines along, on or off the route.	
	b.	Friendly Forces.	
		(1) Role of convoy as applicable within larger context.	
		(2) Units or formation through whose areas convoy is to pass.	
		(3) Refugee or civilian population situation along route.	
		(4) Condition and control of route.	
	c.	Atts and Dets	
		(1) Composition of vehicle column.	
		(2) Any other support which is attached, in particular, helicopters and infantry.	

				Format	Remarks
2.	MIS	<u>SION</u> .	To esco	ort convoy from	
	to		by	(date/time)	
3.	EXE	CUTIO	<u>NC</u>		
	a.			ould cover the forming up of convoy, route to be al points along route and any deceptive measures.	
	b.	Grou	iping ar	nd Tasks	
		(1)	<u>Adva</u>	nce Group.	
			(a)	Composition to include helicopters.	
			(b)	Method of movement.	
			(c)	Critical points and tasks for possible alternate routes.	
		(2)	Close	Protection Group	
			(a)	Composition.	
			(b)	Location in column.	
			(c)	Method of movement.	
			(d)	Any specific actions.	
			(e)	Other tasks such as briefing of column.	
		(3)	Reser	rve Group	
			(a)	Composition.	
			(b)	Method of movement.	
			(c)	Any other specific instructions.	
			(d)	Other tasks such as local protection of FUP.	

		Format	Remarks
c.	Coord	dinating Instructions	
	(1)	Timings	
		(a) H-Hour.	
		(b) ETA at destination.	
		(c) Delay between advance group. column and reserve group.	
	(2) Ambush Drills for likely areas and rehearsals if time permits.		
	(3)	Route, Critical points, Alternates, Reference Points and Halts.	
	(4)	Speed, Intervals and Order of march in column.	
	(5)	Any liaison or agreed control measures with friendly units along the route.	
	(6)	Light policy for night move.	
	(7)	Action in case of air attack.	
	(8)	Individual vehicle protection measures.	
	(9)	Route signing if any.	
	(10)	Action in build-up and halt areas.	
	(11)	Inspection of all vehicles	
	(12)	Deployment at end of mission.	